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Ontario. Legislative Assembly

SESSIONAL PAPERS

VOL. LIII.—PART VII

SECOND SESSION

OF THE

FIFTEENTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO

SESSION 1921

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TORONTO:

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1922

VOL. LIII—PART VII



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PROVINCE OF ONTARIO

LIST OF SESSIONAL PAPERS

PRESENTED TO THE HOUSE DURING THE SESSION

TITLE	No.	Remarks
Accounts, Public, 1921	1	<i>Printed.</i>
Agricultural College, Report	30	<i>Printed.</i>
Agricultural and Experimental Union Report	32	"
Agricultural Societies, Report	42	"
Agriculture, Department of, Report	29	"
Bee-Keepers Association, Report	37	<i>Printed.</i>
Canada Copper Co., correspondence	79	<i>Not Printed.</i>
Civil Service Commission, Report of	87	<i>Printed.</i>
Commission on University Finances, Report of	65	<i>Printed.</i>
Convictions under Temperance Act	84	<i>Not Printed.</i>
Coroners, Interim Report <i>re</i>	80	<i>Printed.</i>
Dairymen's Associations, Report	38	<i>Printed.</i>
Distribution of Statutes	60	<i>Not Printed.</i>
Dismissal, Lewis R. Luke	75	<i>Not Printed.</i>
Division Courts, Report	5	<i>Printed.</i>
Dunnville Police Magistrate, Report of Commission, <i>re</i> ...	94	<i>Not Printed.</i>
Education, Report	17	<i>Printed.</i>
Elections, Returns from Records	51	"
Entomological Society, Report	36	"
Estimates, 1920-21	2	"
Fish caught in Nipigon, etc.	83	<i>Not Printed.</i>
Friendly Societies, Report	11	<i>Printed.</i>
Fruit Growers' Association, Report	44	<i>Printed.</i>
Game and Fisheries, Report	14	<i>Printed.</i>
Goals, Prisons and Reformatories, Report	26	<i>Printed.</i>
Government Buildings outside, Return <i>re</i>	91	<i>Not Printed.</i>
Hospitals, etc., Order-in-Council, <i>re</i>	93	<i>Not Printed.</i>
Health, Report of Board of	21	<i>Printed.</i>
Highways, Report	15	"
Horticultural Societies, Report	43	"
Hospitals and Charities, Report	25	"

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Housing, Report on	40	<i>Printed.</i>
Hydro-Electric Power Commission, Report	49	"
Hydro wages, Report of Committee	77	"
Hydro-Electric, Report as to Distribution of Power	59	Printed for Distribution
Idiots and Epileptics, Report	23	<i>Printed.</i>
Insane Hospitals, Report	22	"
Insurance, Report	10	"
Increase in Mining Taxes	78	<i>Not Printed.</i>
Issuers of Marriage Licenses, Return <i>re</i>	70	"
Judge Coatsworth's Report on Criminal Justice	56	<i>Part 8, 1920.</i> <i>Sess. Vol.</i>
Lands, Forests and Mines, Report	3	<i>Printed.</i>
Legal Offices, Report	6	"
Library, Report	53	<i>Not Printed.</i>
License Commissioners, Report on O. T. A.	28	<i>Part 6, 1920.</i> <i>Sess. Vol.</i>
Live Stock Branch, Report	39	<i>Printed.</i>
Loan Corporations, Statements	12	<i>Printed.</i>
Loans, Return <i>re</i>	92	<i>Not Printed.</i>
Magistrates, <i>re</i> correspondence O.T.A.	71	<i>Not Printed.</i>
Marriage Licenses, Report	62	<i>Printed.</i>
Mines, Report	4	<i>Printed.</i>
Mining Tax Act, amounts credited to	82	<i>Not Printed.</i>
Mothers' Allowance, Report of	88	<i>See Sess.</i> <i>Vol., 1922.</i>
Municipal Affairs, Bureau of, Report	47	<i>Printed.</i>
Municipal Auditor, Report	8	<i>Printed.</i>
Ontario Board of Parole	57	<i>Printed.</i>
Ontario Athletic Commission	76	<i>Not Printed.</i>
Ontario Railway and Municipal Board, Report	50	<i>Printed.</i>
Orders-in-Council, Ed. Report	61	<i>Not Printed.</i>
Ottawa-Prescott Highway	90	<i>Not Printed.</i>
Police Magistrates, Report <i>re</i>	63	<i>Printed.</i>
Prevention Venereal Diseases	73	<i>Not Printed.</i>
Proportional Representation	81	<i>Printed.</i>
Provincial Archivist, Report	52	<i>Part 8, 1920.</i> <i>Sess. Vol.</i>
Provincial Auditor, Report	54	<i>Printed.</i>

TITLE.	No.	Remarks.
Public Works, Report	13	<i>Printed.</i>
Queenston-Chippawa Development, Johnson Report	85	<i>Printed.</i>
“ “ “ Lea's Report	86	<i>Printed.</i>
Queenston-Chippawa, Cooper Report	89	<i>Printed.</i>
Queen Victoria Niagara Falls Park, Report	9	<i>Printed.</i>
Registrar-General, Report	20	<i>Printed.</i>
Registry Offices, Report	7	<i>Printed.</i>
Rural Credits Committee, Report	58	<i>Printed.</i>
School Books, Return <i>re</i>	66	<i>Not Printed.</i>
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Soldiers' Aid Commission, Annual Report	69	<i>Not Printed.</i>
Spruce Falls Paper & Pulp Co., Return <i>re</i>	68	<i>Not Printed.</i>
Stallion Enrolment Board, Report	33	<i>Printed.</i>
Statistical Branch, Report	46	<i>Printed.</i>
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Temiskaming and N. O. Railway, Report	48	<i>Printed.</i>
Timber Limits, Return <i>re</i>	64	<i>Not Printed.</i>
Timber Licenses, Report <i>re</i>	67	<i>Printed.</i>
Toronto University, Report	18	<i>Printed.</i>
Trades and Labour, Report	16	<i>Printed.</i>
Vegetable Growers, Report	34	<i>Printed.</i>
Vineland Station, Report	45	<i>Not Printed.</i>
Women's Institutes, Report	41	<i>See 1922</i> <i>Sess.</i>
Workmen's Compensation Board, Report	55	<i>Printed.</i>

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| No. 1 | Public Accounts of the Province for the year ending 31st October, 1920. Presented to the Legislature, 11th February, 1921. <i>Printed.</i> |
| No. 2 | Estimates—Supplementary for the service of the Province for the year ending 31st October, 1921. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> Further supplementary estimates presented to the Legislature 15th April, 1921. <i>Printed.</i> Estimates for the year ending October 31st, 1922. Presented to the Legislature, 21st April, 1921. <i>Printed.</i> |

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| No. 4 | Report of the Department of Mines for the year 1920. Presented to the Legislature, 21st March, 1921. <i>Printed.</i> |

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| No. 5 | Report of the Inspector of Division Courts for the year 1920. Presented to the Legislature, 7th February, 1921. <i>Printed.</i> |
| No. 6 | Report of the Inspector of Legal Offices for the year 1920. Presented to the Legislature, 21st March, 1921. <i>Printed.</i> |
| No. 7 | Report of the Inspector of Registry Offices for the year 1920. Presented to the Legislature, 21st March, 1921. <i>Printed.</i> |
| No. 8 | Report of the Provincial Municipal Auditor for the year 1920. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> |
| No. 9 | Report of the Commissioners for the Queen Victoria Niagara Falls Park for the year 1920. Presented to the Legislature, 29th April, 1921. <i>Printed.</i> |
| No. 10 | Report of Superintendent of Insurance for the year 1920. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> |

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| No. 11 | Report of the Registrar of Friendly Societies for the year 1920. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> |
| No. 12 | Loan and Trust Corporations' statement being abstracts from financial statements made by building societies, loan companies, loaning land companies and trust companies for the year ended December 31st, 1919. Presented to the Legislature, 1st February, 1921. <i>Printed.</i> |
| | Report of the Registrar of Loan Corporations for the year 1920. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> |

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| No. 13 | Report of the Minister of Public Works for the year 1920. Presented to the Legislature, 15th February, 1921. <i>Printed.</i> |
| No. 14 | Report of the Game and Fisheries Department for the year 1920. Presented to the Legislature, 7th March, 1921. <i>Printed.</i> |
| No. 15 | Report of the Department of Public Highways for the year 1920. Presented to the Legislature, 28th April, 1921. <i>Printed.</i> |
| No. 16 | Report of the Department of Labour for the year 1920. Presented to the Legislature, 29th April, 1921. <i>Printed.</i> |
| No. 17 | Report of the Minister of Education for the year 1920. Presented to the Legislature, 13th April, 1921. <i>Printed.</i> |
| No. 18 | Report of the Board of Governors of the University of Toronto for the year ending 30th June, 1920. Presented to the Legislature, 2nd February, 1921. <i>Printed.</i> |

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| No. 19 | Report of the Secretary and Registrar of the Province for the year 1920. Presented to the Legislature, 28th April, 1921. <i>Printed.</i> |
| No. 20 | Report of the Registrar-General relating to the Registration of Births, Marriages and Deaths for the year ending 1920. Presented to the Legislature, 1st March, 1921. <i>Printed.</i> |
| No. 21 | Report of the Provincial Board of Health for the year 1920. Presented to the Legislature, 11th February, 1921. <i>Printed.</i> |
| No. 22 | Report of the Inspector of Prisons and Public Charities upon the Ontario Hospitals for the Insane for the year 1920. Presented to the Legislature, 13th April, 1921. <i>Printed.</i> |
| No. 23 | No Report. |

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- No. 24 No Report.
- No. 25 Report upon the hospitals and charitable institutions for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*
- No. 26 Report upon the prisons and reformatories for the year 1920. Presented to the Legislature, 13th April, 1921. *Printed.*

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- No. 27 Report upon the neglected and dependent children for the year 1920. Presented to the Legislature, 29th April, 1921. *Not Printed.*
- No. 28 Report upon the operation of the Ontario Temperance Act for the year 1920. Presented to the Legislature, 14th February, 1921. *Printed. Part 6, 1920, Sess. Vol.*
- No. 29 Report of the Minister of Agriculture for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 30 Report of the Ontario Agricultural College and Experimental Farm. for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 31 No Report.
- No. 32 Report of the Agricultural and Experimental Union for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*
- No. 33 Report of the Stallion Enrolment Board for the year 1920. Presented to the Legislature, 1st February, 1921. *Printed.*
- No. 34 Report of the Vegetable Growers' Association for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*
- No. 35 No Report.
- No. 36 Report of the Entomological Society for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 37 Report of the Beekeepers' Association for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 38 Report of the Dairymen's Associations for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 39 Report of the Live Stock Branch for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 40 Report *re* Housing of the Bureau of Municipal Affairs for the year 1920. Presented to the Legislature, 29th April, 1921. *Printed.*

- No. 41 Report of the Women's Institutes for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 42 Report of the Agricultural Societies and the Convention of the Ontario Associations and Exhibitions for the year 1920. Presented to the Legislature, 16th February, 1921. *Printed.*
- No. 43 Report of the Horticultural Societies for the year 1920. Presented to the Legislature, 27th April, 1921. *Printed.*
- No. 44 Report of Fruit Growers' Association for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*

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- No. 45 No Report.
- No. 46 Report of the Statistics Branch of the Department of Agriculture for the year 1920. Presented to the Legislature, 22nd April, 1921. *Printed.*
- No. 47 Report of Bureau of Municipal Affairs for the year 1920. Presented to the Legislature, 11th February, 1921. *Printed.*
- No. 48 Report of the Temiskaming and Northern Ontario Railway for the year 1920. Presented to the Legislature, 10th March, 1921. *Printed.*
- No. 49 Report of the Hydro-Electric Power Commission for the year 1920. Presented to the Legislature, 4th April, 1921.

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- No. 50 Report of The Ontario Railway and Municipal Board for the year 1920. Presented to the Legislature, 21st March, 1921. *Printed.*
- No. 51 A Return from the Records of the By-Elections to the Legislative Assembly held on the 19th day of July and the 8th day of November, 1920, shewing:—
 (1) The number of Votes Polled for each Candidate in each Electoral District in which there was a contest; (2) The majority whereby each successful Candidate was returned; (3) The total number of Votes Polled; (4) The number of Votes remaining unpolled; (5) The number of names on the Polling Lists; (6) The number of Ballot Papers sent out to each Polling Place; (7) The Used Ballot Papers; (8) The Unused Ballot Papers; (9) The Rejected Ballot Papers; (10) The Cancelled Ballot Papers; (11) The Declined Ballot Papers; (12) The Ballot Papers taken from Polling Places; (13) A General Summary of Votes cast in each Electoral District. Presented to the Legislature, 25th January, 1921. *Printed.*

No. 52	Report of the Bureau of Archives for the Province of Ontario, 1920. Presented to the Legislature, 15th April, 1921. <i>Printed.</i> —Supplement to Report of the Bureau of Archives, 1920. Presented to the Legislature, 27th April, 1921. <i>Printed.</i>
No. 53	The Report of the Librarian on the state of the Library. Presented to the Legislature, 26th January, 1921. <i>Not Printed.</i>
No. 54	Auditor's Report for the year 1919-20. Presented to the Legislature, 8th March, 1921. <i>Printed.</i>
No. 55	Report of the Workmen's Compensation Board for 1920. Presented to the Legislature, 28th April, 1921. <i>Printed.</i>
No. 56	Report on the Administration of Criminal Justice and Treatment of Prisoners in New York, Chicago, Detroit and Toronto, by His Honour Judge Coatsworth, Senior Judge of the County of York, Province of Ontario. Presented to the Legislature, 5th April, 1921. <i>Printed.</i>
No. 57	Report of the Ontario Board of Parole for the year ending 31st October, 1920. Presented to the Legislature, 21st February, 1921. <i>Printed.</i>
No. 58	Report of the Committee on Rural Credits. Presented to the Legislature, 11th February, 1921. <i>Printed.</i>
No. 59	Report of the Select Committee of the Legislative Assembly, as to a more equitable system of distribution of Hydro-Electric power and a more uniform price. Presented to the Legislature, 26th January, 1921. <i>Printed.</i>
No. 60	Statement of the distribution of the Revised and Sessional Statutes for the year 1920. Presented to the Legislature, 1st February, 1921. <i>Not Printed.</i>
No. 61	Regulations and Orders-in-Council passed since the last Session of the Legislature under the authority of the Department of Education Act, or of the Public Schools, Separate Schools or High Schools. Presented to the Legislature, 1st February, 2nd February, 14th February, 7th March, 21st March, 13th April, 1921. <i>Not Printed.</i>
No. 62	Interim Report <i>re</i> Issuers of Marriage Licenses, Public Service Commission. Presented to the Legislature, 11th February, 1921. <i>Printed.</i>
No. 63	Interim Report of the Public Service Commission <i>re</i> Police Magistrates. Presented to the Legislature, 11th February, 1921. <i>Printed.</i>

- No. 64 The Minister of Lands and Forests presented to the House, a Return to an Order of the House showing 1. How many Timber Limits have been offered for sale since 1st December, 1919, and where situated. 2. Were they all sold by tender. 3. The date of sale, area, and price paid. 4. Were any withdrawn after being advertised, and if so, why. 5. How many tenders were received in each case. 6. The name of the successful tenderer. 7. The amount of bond given in each case by the successful tenderer. Presented to the Legislature, 16th February, 1921. Mr. *Tolmie*. *Not Printed*.
- No. 65 Report of the Commission to enquire into and report upon a basis for determining the financial obligations of the Province toward the University of Toronto, and the financial aid which the Province may give to Queen's University of Kingston and the Western University of London, etc., etc. Presented to the Legislature, 21st February, 1921. *Printed*.
- No. 66 Return to an Order of the House of the 14th day of February for a Return showing dates when tenders called for, the tenders received and the names of tenderers for the production of (a) Ontario Public School Readers, each respectively; (b) Ontario Public School Histories, each respectively; (c) Ontario High School History; (d) Ontario Composition and Grammar. Presented to the Legislature, 21st February, 1921. Mr. *Sinclair*. *Not Printed*.
- No. 67 Interim Reports (First, Second and Third) of the Commission to investigate and report upon the accuracy or otherwise of all returns made pursuant to The Crown Timber Act, sec. 14, by any holder of a Timber License, etc., etc., etc. Presented to the Legislature, 23rd February, 1921. *Printed*.
- No. 68 Return to an Order of the House of the 23rd February, 1921, for a Return of copies of all correspondence between the Minister of Lands and Forests, the Prime Minister, or any Minister of the Government and any official, representative or solicitor on behalf of the Spruce Falls Pulp & Paper Co., together with all estimates, reports, conditions of sale, maps, documents and papers of every kind and nature, relating to (1) The sale of the Kapuskasing Soldiers' and Sailors' Settlement Colony; (2) The additional area acquired by the Company to add to the concession known as the Kapuskasing Pulp Concession; (3) Relating to the establishment of the Government Town Site at Kapuskasing. Presented to the Legislature, 24th February, 1921. Mr. *Magladery*. *Not Printed*.
- No. 69 Annual Report of the Soldiers' Aid Commission of Ontario for year ending 31st October, 1919. Presented to the Legislature, 1st March, 1921. *Not Printed*.

- No. 69 Report of Soldiers' Aid Commission for the year 1920. Presented to the Legislature, 21st March, 1921.
- No. 70 Return to an Order of the House of 23rd February, 1921, that there be laid before the House, a Return showing the number of Issuers of Marriage Licences in the Province of Ontario, with their names and addresses and the date of their appointment. Presented to the Legislature, 1st March, 1921. Mr. Ross, Kingston. *Not Printed.*
- No. 71 Return to an Order of the House of 9th February, 1921, that there be laid before the House a Return of copies of all correspondence, papers and documents since 13th November, 1919, relating to conduct or duties of Magistrates, Justices of the Peace and other officers with reference to enforcement of The Ontario Temperance Act. Presented to the Legislature, 1st March, 1921. Mr. Hill. *Not Printed.*
- No. 72 Return to an Order of the House of 23rd February, 1921, that there be laid before the House a Return of copies of the Report of the Superintendent of Provincial Police to the Attorney-General for the years 1918, 1919 and 1920. Presented to the Legislature, 1st March, 1921. Mr. Godfrey. *Not Printed.*
- No. 73 Return to an Order of the House of 23rd February, 1921, for a Return showing copy of Agreement between Provincial Board of Health and Federal Health Department relating to prevention of Venereal Diseases. 2. What amount has already been received by the Province to date. Presented to the Legislature, 4th March, 1921. Mr. Price. *Not Printed.*
- No. 74 Return to an Order of the House of 4th February, 1921, for a Return of copies of all correspondence passing between the Government of Ontario or any member, officer or official thereof, or of any department thereof and any member of the House or other person leading up to it, and dealing with the suspension and resignation of Messrs. Smith and Hanna from the Provincial Police. Presented to the Legislature, 4th March, 1921. Mr. Tolmie. *Not Printed.*
- No. 75 Return to an Order of the House of the 4th February, 1921, for a Return of copies of all correspondence with and by the Government or any department thereof leading up to and relating to the dismissal of Mr. Lewis R. Luke as License Inspector for Ontario County. Presented to the Legislature, 4th March, 1921. Mr. Sinclair. *Not Printed.*

No. 76	Statement and Report of the Ontario Athletic Commission and of Auditor for the year 1920. Presented to the Legislature, 4th March, 1921. <i>Not Printed.</i>
No. 77	Report of the Commission upon the rates of wages paid to men employed by The Hydro-Electric Power Commission in the construction of the Queenston-Chippewa Development. Presented to the Legislature, 4th March, 1921. <i>Printed.</i>
No. 78	Return to an Order of the House of 28th February, 1921, that there be laid before the House a Return of copies of all letters, reports and communications of every kind received by the Minister of Mines or any member of the Government with respect to the proposed increase in mining taxes. Presented to the Legislature, 9th March, 1921. Mr. <i>Ferguson.</i> <i>Not Printed.</i>
No. 79	Return to an Order of the House of 23rd February, 1921, for a Return of copies of all correspondence between the Government or any member or any Minister or official and the Canada Copper Company (International Nickel Company) and George E. Buchanan relating to leases or grants of nickel-bearing or other mineral lands in the Township of Creighton, District of Sudbury, since 13th November, 1919. Presented to the Legislature, 10th March, 1921. Mr. <i>Dewart.</i> <i>Not Printed.</i>
No. 80	Interim report respecting Coroners of the Commission to inquire, consider and report upon the best mode of selecting, appointing and remunerating Sheriffs, etc., etc. Presented to the Legislature, 18th March, 1921. <i>Printed.</i>
No. 81	Report of the Committee on Proportional Representation. Presented to the Legislature, 5th April, 1921. <i>Printed.</i>
No. 82	Return to an Order of 16th February, 1921, that there be laid before the House a Return showing what are the amounts paid by each Company respectively which make up the total credited to The Mining Tax Act in the Public Accounts for 1920 at page a31 under the heading: (a) Acreage tax, \$71,223.26; (b) Profits tax, \$713,291.46. Presented to the Legislature, 21st March, 1921. Mr. <i>McAlpine.</i> <i>Not Printed.</i>
No. 83	Return to an Order of the House, of 9th February, 1921, that there be laid before the House a Return showing:—1. What was the total quantity of fish caught in Lake Nipissing and Lake Nipigon, respectively, and marketed in the following years—1917, 1918, 1919 and 1920. 2. What were the varieties of fish caught and marketed in Lake Nipissing and Lake Nipigon respectively, and

the quantity of each. 3. What was the price paid to fishermen for each variety; what was the price at which the Government sold each variety; to whom were such sales made. 4. To whom were licenses issued to take fish from Lake Nipissing and Lake Nipigon respectively, in the years 1917, 1918, 1919 and 1920. 5. Is it the intention of the Government to continue this Fishery Department as a commercial enterprise. 6. What were the gross receipts from fish sales in Lake Nipissing and Lake Nipigon in the years 1917, 1918, 1919 and 1920, and what were the net profits of the Government in each of said years. Presented to the Legislature, 1st April, 1921. Mr. Mageau. *Not Printed.*

- No. 84 Return to an Order of 23rd February, 1921, that there be laid before the House a Return showing the number of convictions made under The Ontario Temperance Act for breaches of the said Act for year 1919-20: 1. At the instance of officers of the Board of License Commissioners. 2. At the instance of officers of the Ontario Provincial Police. 3. At the instance of Municipal Police officers. 4. The number of cases in which fines or sentences have been remitted, reduced, or commuted: (1) Upon the recommendation of the Board of License Commissioners; (2) Without the recommendation of the Board of License Commissioners. Presented to the Legislature, 13th April, 1921. Mr. Godfrey. *Not Printed.*
- No. 85 Copy of Report of R. D. Johnson *et al* on the Queenston-Chippawa Power Development, with statement of professional record of H. S. Kerbaugh and Francis Lee Stuart, with letters. Presented to the Legislature, 13th April, 1921. *Printed.*
- No. 86 Report of R. S. Lea, Consulting Engineer of Progress on Queenston-Chippawa Power Development, 31st January to 9th April, 1921. Presented to the Legislature, 13th April, 1921. *Printed.*
- No. 87 Report of the Civil Service Commissioner for Ontario, 1920. Presented to the Legislature, 15th April, 1921. *Printed.*
- No. 88 First Annual Report of The Mothers' Allowances Commission for the year 1920. Presented to the Legislature, 20th April, 1921. *Printed.*
- No. 89 Final Report of Hugh L. Cooper & Co. *re* Queenston-Chippawa Development of the Hydro-Electric Power Commission of Ontario. Presented to the Legislature, 21st April, 1921. *Printed.*
- No. 90 Return to an Order of the House of the 25th February, 1921, that there be laid before this House a Return showing:—1. How many miles are included in the Ottawa-Prescott Highway. 2. How

many miles of this Highway were completely graded at the end of the year 1920. 3. How much grading still remains to be done. 4. What was the average cost *per* mile of the grading completed. 5. What amount was spent during the year 1920 on equipment for the Ottawa-Prescott Highway. 6. How many men were employed in each of the months of 1920. 7. Has the Government purchased any gravel pits or stone quarries along or in the vicinity of the right-of-way of the Ottawa-Prescott Highway, and if so (a) From whom; (b) What was paid for each; and (c) What was the area of each. 8. Has the Government rented any gravel pits or stone quarries along or in the vicinity of the right-of-way of the Ottawa-Prescott Highway, and if so (a) From whom; (b) What was paid for each; and (c) What was the area of each. 9. Did the Government purchase any gravel or stone for the right-of-way of the Ottawa-Prescott Highway, and if so (a) From whom; (b) What was paid per cubic yard; and (c) What was the total amount paid each man. 10. How many culverts were built during the year 1920. 11. How many still remain to be completed. 12. How many culverts were built (a) By day labour; (b) By contract. 13. If any were built by the latter (a) Who were the contractors; (b) What were the unit prices paid; (c) What lump sums were paid to each contractor. 14. What was the cost *per* cubic yard of the said culverts in place built by day labour. 15. What was the cost *per* cubic yard of the said culverts in place built by contract. 16. What was the total amount spent on the Ottawa-Prescott Highway to 31st December, 1920. 17. Have the plans of the said Highway been filed in the Federal Department of Railways pursuant to the Canada Highways Act, and if so, when. 18. Has a subsidy agreement been signed with the Dominion Government pursuant to the Canada Highways Act. 19. If so, what is the date of the agreement. 20. Has the Government received any payments on account of Dominion Government subsidy, and if so, the dates and amounts of the payments. 21. What wages were paid during 1920, on the Ottawa-Prescott Highway (a) For unskilled labour; (b) For teams with driver. 22. How many hours a day did the men employed on the road during 1920 work. 23. Who was the engineer in charge of the road during 1920, and what was his salary. 24. Has the Government settled with all the parties from whom the right-of-way was acquired. 25. If the answer to 24 is in the negative, what parties still remain to be settled with. Presented to the Legislature, 28th April, 1921. Mr. Hill. *Not Printed.*

No. 91. Return to an Order of 4th March, 1921, that there be laid before this House a Return showing:—1. What places in the City of Toronto are employed for Government use outside the Legislative Building. 2. For what Department, Commission or Board are they being used. 3. What are the terms of rental or lease. 4. How much has been expended on improvements on each place

to date. 5. On what dates was possession taken under the different leases. 6. How many employees are at work in each of the respective buildings so leased. Presented to the Legislature, 29th April, 1921. Mr. *Ross*, Kingston. *Not Printed*.

No. 92

Return to an Order of 21st February, 1921, that there be laid before this House a Return of copies of all papers and correspondence between the Government or any member thereof or any official on behalf of the Government and any other Corporation or person relating to: (a) Loan "R.R." sold to syndicate composed of the Dominion Securities and others; (b) Loan for \$16,000,000 at 6 *per cent.*, repayable in fifteen years for which the price of 92.34 was realized; (c) The loan "S.S." sold to the syndicate composed of Aemilius Jarvis and others; (d) The loan for \$10,000,000 at 6 *per cent.*, repayable in twenty years for which the price of 96.787 was realized. Presented to the Legislature, 29th April, 1921. Mr. *Hay*. *Not Printed*.

No. 93

Copies of Orders-in-Council designating, pursuant to section 14 of The Hospitals and Charitable Institutions Act, Hospitals, Refuges, Orphanages and Infants' Homes, to which aid be granted. Presented to the Legislature, 29th April, 1921. *Not Printed*.

No. 94

Report of the Commission to inquire into and report upon the truth or falsity of the charges made against David Hastings, Police Magistrate, Dunnville. Presented to the Legislature, 29th April, 1921. *Not Printed*.

Ontario Department of Agriculture

ANNUAL REPORT

OF THE

STATISTICS BRANCH

(Continuing the Report Issued by the former Bureau of Industries)

1920

PART I.—AGRICULTURAL STATISTICS

PART II.—CHATTEL MORTGAGES.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

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1921

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16 PEARL STREET
TORONTO

To His Honour LIONEL H. CLARKE,

Lieutenant-Governor of the Province of Ontario, etc., etc.

MAY IT PLEASE YOUR HONOUR:

I have the honour to present herewith for your consideration the report of the Statistics Branch of the Ontario Department of Agriculture for the year 1920.

Respectfully yours,

MANNING W. DOHERTY,

Minister of Agriculture.

TORONTO, 1921.

Statistics Branch of Agriculture

PART I.—AGRICULTURAL STATISTICS

THE WEATHER.

TEMPERATURE.—The following table gives the temperature of the Province for each month during the last five years, together with the mean annual temperature, also the mean temperature for the six months, April-September, practically the growing season, together with the average for the five years 1916-1920, and the thirty-nine years, 1882-1920.

Months.	1920	1919	1918	1917	1916	1916- 1920	1882- 1920
	°	°	°	°	°	°	°
January.....	7.8	24.5	8.5	17.8	24.9	16.7	17.9
February.....	15.8	23.7	16.5	12.3	15.1	16.7	17.2
March.....	31.2	30.7	31.1	29.6	21.6	28.8	27.0
April.....	38.9	41.0	42.7	40.2	43.1	41.2	41.7
May.....	53.4	53.9	57.2	48.2	53.2	53.2	53.7
June.....	64.9	71.1	61.2	60.7	60.1	63.6	63.5
July.....	65.0	71.3	68.2	69.5	74.0	69.6	68.2
August.....	68.0	66.3	69.4	66.4	70.1	68.0	65.7
September.....	61.9	61.2	54.3	57.3	59.5	58.8	59.2
October.....	54.1	50.1	49.9	42.5	47.4	48.8	47.5
November.....	34.3	34.4	39.3	32.0	34.9	35.0	35.3
December.....	27.2	17.9	27.7	14.8	22.1	21.9	23.5
Annual mean.....	43.6	45.5	43.8	40.9	43.8	43.5	43.4
Mean for six months, April to September...	58.7	60.8	58.8	57.1	60.0	59.1	58.7

The mean temperature for 1920 was 43.6 degrees, or 1.9 degree colder than the preceding year, and practically average, being only 0.2 degree above the normal for the thirty-nine years, 1882-1920.

The mean for the six months, April-September, was 2.1 degrees colder than the preceding year, and exactly the same as the thirty-nine year normal. October was the warmest month, relatively, being 6.6 degrees above, while January was the coldest with 10.1 degrees below. Six months were above and six below normal.

SUNSHINE.—In the following table the averages of sunshine are derived from the records of the weather stations at Woodstock, Toronto, Lindsay, Kingston and Ottawa.

Months.	Sun above horizon	1920	1919	1918	1917	1916	1916- 1920	1882- 1920
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
January.....	285.7	99.3	84.5	106.8	73.9	71.8	87.3	76.6
February.....	302.5	115.4	116.6	96.1	121.9	96.6	109.3	104.8
March.....	369.9	155.7	148.3	182.7	154.3	158.4	159.9	146.3
April.....	406.4	145.6	139.7	194.7	157.7	154.1	158.3	180.9
May.....	461.1	265.6	192.9	208.3	183.4	206.7	211.4	211.4
June.....	465.7	227.0	307.0	261.6	205.3	192.0	238.6	247.0
July.....	470.9	231.5	308.8	272.2	240.7	309.8	272.6	267.4
August.....	434.5	227.0	210.6	260.3	233.0	275.1	241.2	239.5
September.....	376.3	217.6	184.8	144.3	197.7	167.6	182.4	186.0
October.....	340.2	156.3	119.6	134.3	91.4	154.9	131.3	138.4
November.....	286.9	49.6	58.9	84.3	115.6	101.7	82.0	79.3
December.....	274.3	47.2	75.8	64.7	98.4	72.8	71.8	62.1
Total for the year	4,474.4	1,937.8	1,947.5	2,010.3	1,873.3	1,961.5	1,946.1	1,939.7
Total for six months, April to September.....	2,614.9	1,314.3	1,343.8	1,341.4	1,217.8	1,305.3	1,304.5	1,332.2

The year 1920 had 1,937.8 hours of sunshine, almost the average, being only 1.9 below the normal for the last thirty-nine years. The six growing months, April to September, had 1,314.3 hours, or 17.9 less than the thirty-nine year period. Six months were in excess and six were deficient, May with 54.2 hours above and July with 35.9 hours below, having the greatest departures. The month of April was also low, being 35.3 hours below normal.

PRECIPITATION.—The fall of both rain and snow for the five winter months, including November, 1919, and March, 1920, is given in the following table for five years, together with the average for the thirty-nine years, 1882-1920. One inch of water is equivalent to ten inches of snow.

Months.	1920	1919	1918	1917	1916	1916- 1920	1882- 1920
	in.	in.	in.	in.	in.	in.	in.
November:							
Rain.....	1.89	2.03	0.56	1.49	1.92	1.58	1.98
Snow.....	7.2	3.1	7.0	6.8	4.3	5.7	7.3
December:							
Rain.....	0.07	1.37	0.14	0.85	0.69	0.62	1.10
Snow.....	14.1	15.4	20.4	16.6	18.8	17.1	15.6
January:							
Rain.....	0.00	0.55	0.02	0.66	2.26	0.70	0.95
Snow.....	20.1	11.4	28.9	20.3	14.9	19.1	19.3
February:							
Rain.....	0.00	0.57	1.50	0.35	0.07	0.50	0.75
Snow.....	14.8	9.6	17.2	14.0	19.4	15.0	15.9
March:							
Rain.....	1.28	1.82	0.54	1.12	0.57	1.07	1.16
Snow.....	7.3	11.6	10.6	14.8	17.9	12.4	10.7
Five months:							
Rain.....	3.24	6.34	2.76	4.47	5.51	4.47	5.94
Snow.....	63.5	51.1	84.1	72.5	75.3	69.3	68.8

The total amount of rainfall for the five months, November-March, was 3.24 inches, or 2.70 inches below the average for the thirty-nine years, 1882-1920.

The total amount of snowfall was 63.5 inches, or 5.3 inches below normal. January was the only month above, being 0.8 inch; all the others were below, ranging from 0.1 in November to 3.4 inches in March.

The rainfall for the six months, April-September, comprising what is regarded as the growing season for most crops, is given in the following table, covering the last five years, 1916-1920, and the normal for the thirty-nine years, 1882-1920.

Months.	1920	1919	1918	1917	1916	1916-1920	1882-1920
	in.	in.	in.	in.	in.	in.	in.
April.....	2.31	2.53	1.38	2.23	2.64	2.22	1.82
May.....	0.82	4.24	2.62	2.42	4.51	2.92	2.82
June.....	2.85	2.26	2.69	3.79	3.78	3.08	2.77
July.....	3.56	2.16	2.18	3.49	1.53	2.58	2.79
August.....	2.13	2.95	2.94	2.83	1.99	2.57	2.68
September.....	2.43	2.88	4.31	1.40	2.75	2.75	2.63
Total for six months.....	14.10	17.02	16.12	16.16	17.20	16.12	15.51

The rainfall for the six months, April-September, was 14.10 inches, or 2.92 inches less than the preceding year, and in comparison with the normal for the thirty-nine years, it was 1.41 below. The three months, April, June and July, were above, while May, August and September were below their respective averages.

VEGETATION AND SPRING SOWING.

From an agricultural standpoint, the season of 1920 was a comparatively early one. A number of farmers in southwestern Ontario started seeding during the last week of March, as the frost was then out of the ground and the soil was in good tilth. Oats and spring wheat were chiefly sown. Reports from the county of Essex about the 10th of April stated that some spring wheat was already up. Reports a week later were to the effect that seeding was being delayed by broken weather.

The May crop bulletin said: "The latter part of March was so mild that an early season was looked for, but April weather proved to be unpropitious, and during the first week or so of May the nights were more or less frosty. This has thrown growth much behind, and when returns were sent in vegetation is regarded as being from ten days to two weeks later than usual. Live stock generally were then on pasture, but in some districts there was hardly enough grass to satisfy, especially where the animals had been turned out early.

"Spring sowing has been more or less delayed by unfavorable weather, but as correspondents wrote, better weather was prevailing and seeding was being rushed all over the Province. In some localities, however, all grains have been got in, and farmers are now busy on root land. Reports are almost unanimous regarding the excellent quality of the seed bed this spring, and a first-class catch is expected. Rain, however, was needed for best results as returns were being made. The lateness of the season and the scarcity of farm labor

are expected to restrict the acreage of spring crops in the opinion of some correspondents, but others claim that there will be at least a normal spread. Sugar beets, corn and oats are likely to have a slightly increased acreage, and there is some talk of more mixed grains being sown for feed. Early potatoes have been largely planted where good seed could be procured. The comparatively cool season has been very favorable for working horses."

STATISTICS OF FARM CROPS.

Field Crops.	Acres.	Production.	Bushels per acre.	Market Value.	
				Total.	Per acre.
		bush.	bush.	\$	\$ c.
Fall Wheat.....	762,371	18,492,013	24.3	35,759,610	46.91
Spring Wheat.....	267,367	4,480,472	16.8	8,237,182	30.81
Barley.....	484,328	16,660,350	34.4	15,631,613	32.27
Oats.....	2,880,053	129,171,312	44.9	75,159,913	26.10
Peas.....	109,187	2,209,523	20.2	4,270,938	39.12
Beans.....	22,744	380,499	16.7	1,097,137	48.24
Rye.....	133,090	2,349,880	17.7	3,336,240	25.07
Buckwheat.....	143,204	3,190,478	22.3	3,367,161	23.51
Flax.....	21,053	224,893	10.7	515,983	24.51
Corn (in the ear).....	243,909	19,372,277	79.4	12,867,119	52.75
Potatoes.....	157,509	23,961,709	152.1	23,776,530	150.95
Carrots.....	2,706	674,101	249.0	185,378	68.51
Mangels.....	36,450	17,174,290	471.0	4,722,930	129.57
Turnips.....	80,588	40,141,406	498.0	11,038,887	136.98
Sugar Beets.....	36,288	16,497,067	455.0	4,536,693	125.02
Mixed Grains.....	581,689	25,712,447	44.2	20,556,442	35.34
		Tons	Tons		
Corn (for silo) green.....	449,176	4,668,054	10.39	23,340,270	51.96
Hay and Clover.....	3,533,740	4,459,094	1.26	109,036,159	30.86
Alfalfa.....	162,820	399,581	2.45	10,172,434	62.48
Totals—					
1920.....	10,108,272			367,608,619	36.37
1919.....	9,915,884			397,238,400	40.06
1918.....	9,992,825			363,909,778	36.42
1917.....	9,718,259			333,353,438	34.30
1916.....	9,548,876			223,748,948	23.43
1915.....	9,762,951			210,674,415	21.58
1914.....	9,621,444			199,152,945	20.70
1913.....	9,541,537			168,455,253	17.65
1912.....	9,574,474			185,790,341	19.40
1911.....	9,718,741			179,974,358	18.52
1910.....	9,725,684			175,115,742	18.01

The acreages devoted to other crops in 1920 were as follows: Orchards, 248,395; small fruits, 25,635; summer fallow, 216,377; pasture (cleared) 3,432,620.

RATIOS OF AREAS UNDER CROP.—The following table shows the number of acres under the various crops in 1919 and 1920 per 1,000 acres of cleared land, together with annual averages for various periods.

Year	Fall Wheat	Spring Wheat..	Barley.	Oats.	Peas.	Beans.	Rye.	Buckwheat	Corn.	Potatoes.	*Roots.	Hay and Clover.	Mixed Grains.
1920.....	51.0	17.9	32.4	192.5	7.3	1.5	8.9	9.6	46.3	10.5	10.4	247.1	38.9
1919.....	41.6	24.2	38.2	179.5	8.5	1.5	9.4	12.0	41.7	10.6	9.9	245.3	42.2
Annual average:													
1912-1920.....	44.9	13.8	39.3	188.1	9.3	4.3	9.1	13.2	46.7	10.8	11.2	237.6	35.0
1902-1911.....	51.3	13.0	50.7	192.8	27.7	3.6	8.0	9.4	40.1	10.9	15.8	219.0	†33.1
1892-1901.....	73.2	28.0	39.2	180.2	60.5	4.1	10.1	10.3	35.5	12.9	15.6	198.2	.....
1882-1891.....	81.6	50.9	67.2	150.4	60.5	2.4	9.4	6.2	17.7	14.0	12.2	207.1	.....
1882-1920.....	61.7	25.2	48.5	179.2	38.4	3.6	9.1	9.9	35.8	12.1	14.6	215.9	‡37.9

* Mangels, turnips, carrots and sugar beets. † 1907-1911. ‡ 1907-1920.

THE GRAIN CROPS.

FALL WHEAT.—The bulletin issued in November, 1919, thus described the outlook for the wheat recently sown for cutting in 1920: "A number of correspondents describe the new crop of fall wheat as never more promising. Fallows went in early, but other land was harder to plow owing to baking by the long summer drouth. Several returns regard the fields as having too heavy a top for wintering well. Odd mention is made of the Hessian fly in Kent, Elgin, Norfolk, Middlesex and Simcoe. Sowing extended from August 25th to September 20th. The acreage is estimated to be about ten per cent. larger than that of the previous season."

Reports of correspondents, received about the middle of April, were thus summarized: "This crop, with an estimated increase of about ten per cent. in acreage, went into the winter in excellent form. Snow fell early in the season and practically continued without a thaw until March, thus giving unusually good protection to the young plants, from the very cold weather prevailing nearly all winter. In most localities the snow went off nicely about the middle of March, leaving very little ice in the furrows and ditches. The latter part of the month was remarkably spring-like, but the first two weeks in April were more or less broken and raw, although flurries of snow have helped to further protect the fields. Some reports are to the effect that the crop looks a little brown, having been given a set back by April weather, but the majority of returns claim that the young wheat fields never faced the growing season in more promising condition."

Fall wheat when cut fell a little below early expectations, as will be seen by the following from the August bulletin: "The crop has been very uneven in yield, although running fairly close to an average, taking the returns as a whole. The sample is described as being generally well up to or above the average in weight. Much of the straw, however, was short, and some fields had to be cut with the mower. In the western part of the Province, more especially in the Lake Erie counties, more or less injury was done to the crop by the Hessian fly. Most of the cutting was done during the last week of July."

The May bulletin thus referred to the crop: "Fall wheat is likely to be more than an average crop both as to acreage and yield. It entered and came through the winter in excellent form, but after a brief season of early spring promise, the weather took a rather raw turn, and the young fields in some localities received somewhat of a setback, especially on heavy land. The latest reports are, on the whole, encouraging, as the crop is now making good growth, and there has been very little injury from insect pests. There has been practically none plowed up, although on a few patchy spots other grain has been drilled in. The acreage is estimated to be about ten per cent. above that of the previous season."

Reports sent in at the end of November were to the following effect: "Fall wheat is about up to the average per acre of more recent years in yield. Some of it does not grade so high as usual, although there are some reports of being it a good sample. The crop also is light in straw. The fields in several western counties were injured to some extent by the Hessian fly."

THE NEW FALL WHEAT.—The December bulletin said: "The acreage of fall wheat sown is about one-seventh less than that of last year, the falling off being chiefly in the larger wheat-growing counties of the Lake Erie district. On account of the dry condition of the soil at the usual time of seeding, and also

to escape injury from the Hessian fly, a large area went in much later than usual. Sowing ranged from the last week of August to the first week of October, the bulk being got in between the 6th and the 20th of September. The early growth was rather checked by drought, but October weather brought it along with a bound, and on the whole the crop will enter the winter with a good top. Some early sown fields have been attacked by the fly. Dawson's Golden Chaff is the variety chiefly grown."

SPRING WHEAT.—As a result of the poor yield in the preceding year (1919), farmers were much disappointed with spring wheat. The August bulletin remarked: "The acreage of this grain has fallen off greatly, and the returns for the present season will not help to popularize the crop. Some fields were also attacked by the Hessian fly, but not to a serious extent. The crop did best in the eastern half of the Province. Some correspondents speak of even the Marquis wheat as being disappointing.

The bulletin issued in December contained the following discouraging reference to the crop: "Spring wheat has made a poor showing this year, both in acreage and in average yield. It was the poorest of the grain crops, although here and there some fine fields were reported. It suffered somewhat from Hessian fly and from rust. The average yield per acre was only a little over two-thirds of that of fall wheat."

BARLEY.—This grain turned out well both as to yield and quality. The straw also was long and clean. Very little remained to be cut when correspondents reported in the third week of August, but some was waiting to be hauled in for lack of help.

Reports in December concerning barley were also very encouraging, saying: "This has been a good crop for yield, and also for feeding quality, although some discoloration of grain has been reported. Most of the barley raised in Ontario is now fed on the farm, and color is not of so much importance as formerly. The straw is long and clean."

OATS.—The bulletin dealing with crop conditions in the third week of August, said of oats: "A number of correspondents are of opinion that the crop this year will be a record breaker. There are but few small yields and many big ones reported, and the quality of the grain is good. The straw is of unusual length, and will be a great factor in carrying live stock over the winter. Some fields were uncut when correspondents wrote, and some had to be left out in the fields in the shock owing to the rush of work."

The crop bulletin issued in December was equally hearty in praise of the yield and general quality of oats. It said: "It is doubtful if a better general yield of oats, both for grain and straw, has ever been recorded in this Province. Few small, and many generous, yields are reported, some of the best reaching all the way from seventy even up to ninety bushels per acre. A portion of the grain was caught by rain while in shock, but the bulk of the crop was harvested in fine condition."

RYE.—The August returns had little reference to rye, which is not grown generally for grain, but mainly for green feed. Taken all altogether, it was regarded as a fair crop.

The December bulletin also spoke of the limited acreage of rye grown for grain, but said that the quality of the crop was good.

PEAS.—August reports regarding peas were on the whole favorable. Much of the crop now grown in Ontario is raised for the canning factories or for seed, and a Middlesex correspondent stated that from \$60 to \$100 per acre had been received by some growers.

The November bulletin said: "The vines were well podded as a rule, and the quality of the peas ranged from fair to good. Very little mention was made of insect injury, which in the past has been the bane of this crop."

BUCKWHEAT.—The December bulletin had the following regarding buckwheat: "This has been relatively a poor crop, being very uneven in quality. While some fields have given fair results, much of the crop was more or less injured by rain storms about the time of cutting, and some of it was caught by frost."

BEANS.—August reports were to the effect that the acreage of beans was small compared with that of some recent years, but that the yield per acre promised to be well up to the average.

Beans were referred to by correspondents in November as being from fair to good in quality and yield. A few fields were slightly touched by early frosts.

CORN.—The August bulletin said: "Corn has a more uneven stand than usual, but taking the reports as a whole, the present prospects are for a fair yield should there be a full maturing of the crop, for much of the planting was done a little late. Rains were frequent during July, and as a consequence, many fields did not receive proper hoeing at that time. August weather has been more favorable for growth than that earlier in the season. Among the insects mentioned as attacking the crop this year were the wireworm, cutworm, white grub, and corn-borer."

November reports were much brighter, the returns for that month being thus summarized: "This crop, which was not at first a promising one, came along splendidly during the latter part of the season, and complete maturity marked practically every field grown. The few fields caught by frost were those left for late cutting for want of labor. Generally speaking, the stalks were well cobbled and good both for husking and the silo. 1920 will long be remembered as an ideal corn year, taking into consideration yield, quality and weather conditions when harvesting."

HAY AND CLOVER.

The bulletin issued in April said that there was too much hot, dry weather in the previous summer for the young clover to come to its best, and most of the new fields were not in good shape for wintering. The excellent protection of snow, however, prevented winter loss, and as there had been but little spring injury so far, the chances were considered good for a fair crop should the remainder of the season be favorable.

The May bulletin had the following: "Clover has not done so well as fall wheat. Last year's midsummer drouth was trying to the crop, and although it came out of the winter practically as it went under the snow, it lacked thickness of stand. There was also some heaving reported in different localities. Old meadows have done better than the new ones. While some favorable reports have been received as to its present condition, the general impression is that the crop is likely to fall behind the average in yield unless specially favorable weather ensues.

"Alfalfa has done better than clover, but it is not so generally grown. As might be expected, it is said to be looking its best on well drained land.

"Sweet clover appears to be coming into favor both for fodder and for seed, and just now is looking full of promise."

According to the August bulletin, haying began about the 10th of July, and extended over a long period owing to catchy weather and the crowding of the fall wheat harvest. Curing was difficult, as the cut crop needed much turning, and a good deal of inferior hay had gone into the barns. The average yield per acre was considerably below the standard.

It was also stated that alfalfa had done much better than clover and timothy, both first and second cuttings being on the whole satisfactory.

The following was contained in the November bulletin:

"There was a good growth of red clover left for second cutting, but the heads as a rule did not fill well. Some correspondents put the blame on the midge, others on the drought. Several returns place the yield of seed at about half the average.

"Alsike has been only fair for seed, but the quality is said to be good.

"A good yield of sweet clover is reported, although several correspondents speak of second growth taking place and injuring the crop for seed purposes.

"As a hay crop alfalfa did much better than clover, some reporting three good cuttings; but the quantity and quality of the seed has not been up to the standard. An Oxford correspondent asserts that alfalfa raising is going out of favor, but the majority of reports are favorable, especially where the crop is grown for hay."

POTATOES AND FIELD ROOTS

POTATOES.—Reports received during the third week of August were to the following effect: "Although much of the crop had to be planted late owing to wet weather, the general yield will be a full one, especially where the fields received good hoeing. Very little rot or blight has been complained of, but some blackleg is reported in Prince Edward County. The Northern Districts will have only a fair yield."

The December bulletin confirmed these expectations: "There has been a better than average yield of potatoes, with only odd mention of scab or other disease while growing. Since being dug and housed, however, rot has appeared, the loss up to the date of reporting being placed at about ten per cent."

ROOTS.—The August bulletin had the following to say regarding the early prospects of field roots:

"Turnips have done fairly well, and are now making great growth.

"Mangels have been disappointing this season. Many fields had to be resown to turnips, as the seed made a poor start. They have picked up considerably of late.

"Sugar Beets are well spoken of by correspondents, both as regards yield and quality. In fact, they have never looked better."

The December bulletin said: "It is many years since such open and generally favorable weather for gathering roots prevailed. The work of threshing, silo filling, fall plowing, etc., delayed the harvesting of roots in some quarters, and a number of farmers were overtaken with a taste of early wintry weather before digging and storing could be accomplished.

"Turnips may be regarded as yielding a fair crop of good general quality, although some that had been dug had not yet been stored when correspondents wrote, and some may have to remain in the ground over winter. A little rot has been complained of.

"These roots in many cases had poor germination at seeding, and early in the season were rather thin in stand; but later on they made good growth, and in many cases will prove a fair crop notwithstanding the poor start.

"Correspondents are practically unanimous regarding the large yield and excellent quality of sugar beets. More attention was paid to the harvesting of this crop than in the case of the other roots, and they were dug and disposed of comparatively early in the season."

MISCELLANEOUS.

TOBACCO.—According to the August reports, the young plants when set out got a poor start owing to unfavorable weather, and the crop was reported to be very uneven, promising at the best only a fair yield. Many of the plants did not present as mature an appearance as at the same time last year. The cutworm also caused some injury to plants.

November reports regarding this crop were to the effect that the leaf was well matured and gave a good general yield. Several correspondents spoke highly of the quality. The maturing crop practically escaped the frost scatheless.

FLAX.—The August bulletin said: "Only a few correspondents refer to this crop, but what is said is more or less favorable. The stalks are of full length and have stood up well, and there promises to be a good yield of seed. Pulling was being done as correspondents reported."

THRESHING AND MARKETING.—The following appeared in the December bulletin, based on reports of correspondents up to the end of November:

"The season was favorable for threshing, especially as more of this work than usual was done in the open, many of the grain crops being too heavy for handling with the amount of labor available. While a little threshing remains to be done here and there, the bulk of the work has been completed, although delayed somewhat by the heavy crops of barley and oats with their long straw. Wheat sold early and fairly freely at very encouraging prices, then came a slump, and growers are now evidently holding for a better figure. Some oats and barley have also been sold, but farmers generally seem more inclined to feed most of their coarse grains to their live stock if the market prices for beef and pork are considered reasonable. The comparatively late threshing, and the call of fall plowing and other belated field work, have also combined to delay marketing."

AUCTION SALES.—The April bulletin said: "A large number of auction sales have taken place recently, and correspondents note that in many instances live stock and implements have been sold at remarkably high prices. Some of the new farm owners or tenants are from urban districts.

FALL PLOWING.—Based on returns made up to the end of November, the December bulletin said: "Up to the second week of November the weather was open, and on the whole favorable for plowing, and many farmers availed themselves of the opportunity and turned under the acreage planned. With the rush of threshing, corn cutting, silo filling, etc., many others were delayed in their plowing, and were caught by wet and then cold and snowy weather, and as a result fully one-quarter of the intended acreage is so far unplowed. Some are hopeful that mild weather may yet prevail sufficiently long to enable farmers to complete their plowing."

FARM IMPROVEMENTS.—There were comparatively few new buildings erected in rural districts during the year, as prices of material and labor were almost prohibitive. Some fencing was done, but not so much as formerly, and chiefly the replacing of wire for rails. A fair extent of under-draining was done, considering the press of other farm work. The use of ditching machines was mentioned approvingly by several correspondents.

FRUIT.

The following is the gist of April reports: High winds at times during the fall and winter did some damage to orchards, but so far the injury to fruit trees, bushes and vines from the low temperatures of the winter has not yet been shown to be serious. Some girdling of young fruit trees by mice has been complained of. Several correspondents report great neglect of too many orchards by owners.

The May bulletin had the following: "Orchard trees, while a week or two later than usual in leafage, are now blooming generously. One correspondent suggests that the tardy period of blossom may ensure the fruit from late frosts. Some old orchards are reported to be failing, and fewer new trees appear to be taking their place. Small fruits are said to be doing well, although raspberries have been frozen back to a considerable extent in some localities, and a few complaints have been made of winter injury to grapes."

August returns were to the following effect:

"Apples are giving a better general yield than for a number of years summer and fall varieties more especially. They are also said to be freer than usual from worm and spot. Buyers are now busy making contracts, especially for the Spy and other winter sorts.

"Pears are only fair in yield, but of good general quality.

"Peaches are reported to be from fair to good in yield. There are some complaints of curl leaf.

"The plum yield is from medium to good, but the appearance and quality are well up to the standard.

"The yield of cherries was given as from fair to heavy.

"Strawberries, raspberries, and small fruits generally gave good yields as a rule.

"Grapes are described as promising a fairly good crop. The vines have made great summer growth."

There was much excellent fruit left to spoil because of lack of containers and capable handling, as will be seen by the following from the December bulletin: "This season has been a most unusual one in the more recent history of apple growing, on account of the large quantity of that fruit that has been left unpicked or unpacked. More trees than usual were well laden, and wind-falls and other dropped fruit were relatively less than usual, but pickers were hard to find, and there was so great a scarcity of barrels, boxes, baskets and other containers that thousands of bushels of good marketable apples were left to rot on the trees or on the ground. In some instances more went to waste than were marketed. Apples of good quality were sold to the evaporators at fifty cents a cwt. Summer and fall apples were most plentiful, but such standard winter varieties as the Spy, the Greening, and the Baldwin were also in larger quantities than in more recent years, and all have been unusually clean and present-

able so far as both insect and fungus troubles were concerned, while most of the fruit had unusually good coloring. Several correspondents refer to old orchard trees still dying off as a result of the severe winter of 1917-18. Pears have given a fairly good yield, and the same may be said of plums and peaches. Growers of these fruits also lost money through not having a sufficient supply of containers. Small fruits gave satisfactory returns to those growers who had enough boxes or baskets for marketing their goods. Grapes were a good general crop, and with strong local co-operative organization, profitable prices were realized in the Niagara district. Trees, vines and bushes are said to be in good general condition for wintering."

LIVE STOCK AND THE DAIRY.

The April bulletin said: "Fodder supplies of all kinds, except hay and ensilage, have been inadequate for full feeding. Corn for the silo saved the fodder situation during the winter, as the supply was comparatively large and the quality was first-class. Straw for both bedding and feed was so scarce that this commodity has been selling at the highest prices yet paid in this Province. Bran, shorts, and other mill feeds have also reached record prices—almost prohibitive to some owners of live stock. While the yield of hay was well over the average, the scarcity of other fodders has so augmented its value that at the time of reporting it was selling at from \$25 to \$35 a ton in the older sections of the Province, and as high as \$40 in some parts of Northern Ontario.

"Heavy horses are in fair demand at good prices, but ordinary animals are going at low figures. As a consequence breeding has slowed up and fewer colts are in prospect.

"There has been less fattening of beef cattle, most of the animals having been carried through the winter on little more than a maintenance ration, to be finished off on the grass. Owing to the scarcity of fodder many surplus cattle were disposed of early in the winter, although most owners held on to their breeding stock. At present dairy animals are more in demand than those of the beef breeds, prices for good grade cows ranging from \$125 to \$200. Dairy herds have been freshening earlier this season than usual, and cheese factories, which have opened early, are well supplied with milk. Prices of milk to factories, condenseries, and city delivery men vary, from \$2.60 to \$3 per cwt. The lack of straw for bedding was greatly felt during the steadily cold winter.

"Hogs are not so plentiful as they were a year ago, but marketing is still fairly steady, although a number of unfinished animals are being turned off. During the fall and winter many brood sows were disposed of, as the owners considered that the prices for mill feeds and other concentrates left little or no profit for hog raising. A number of complaints have been received of poor spring litters.

"From the more frequent and complimentary references to sheep, it is evident that this branch of the live stock industry is increasing in favor. But for the dog menace a much larger increase would be reported. Lambs have been coming early and strong this season, although a few correspondents complain of the winter having been trying to ewes in lamb."

May reports were to the following effect: "The steadily cold winter, and the long wait before live stock could get on pasture, drew heavily upon stores of feed. Hay, which was a comparatively large crop, had to be fed more or less freely, as straw and grain were scarce, and mill feeds were almost at famine

prices. Hay is now selling at from \$24 to \$35 a ton while straw brings \$10 a ton, and is difficult to procure at that. Many farmers have had to purchase grain for feed, chiefly northwestern oats. The excellent supply and quality of corn ensilage was the main factor in saving the feed situation.

"Notwithstanding the close feeding practised by owners of live stock; the general health of farm animals was never better, although some of them are somewhat leaner than is desirable.

"Butchers' cattle are selling at from 11c. to 13c. a pound, and veal calves are in good demand at from 14c. to 18c. a pound. Dairy cows sell readily at from \$125 to \$150 each.

"Bacon hogs bring from \$18.50 to \$20 a hundredweight, live weight, and little pigs are going at from \$14 to \$16 a pair.

"Sales of horses are reported at prices ranging from \$175 to \$240 each for presentable animals.

"Bees have wintered poorly. Some place the losses at about 50 per cent."

The following appeared in the August bulletin: "Midsummer pastures seldom have been in better condition, the frequent showers of July and early August keeping the fields fresh and inviting for live stock. As a consequence cattle have been in good condition, although much worried by flies, the heel fly being painfully annoying in some counties.

"The milk flow has been steadier and more generous than ordinarily, and was only beginning to lessen appreciably when correspondents were reporting. Cheesemaking appears to be on the decline, with the creameries, condenseries and the city trade competing so closely for favor. More milk producers are selling in cream form than before.

"Hogs are being marketed slowly but steadily at from \$19 to \$19.50 per cwt. Young pigs are selling at from \$5 to \$6 each.

"The prospects for fodder supplies are on the whole good. While hay is a light crop the second growth of clover promises to be better than usual, the straw of both barley and oats is unusually long, corn will likely be a good crop if there be no early frosts, and roots promise to be a fairly full crop."

A summary of live stock conditions at the end of November is appended: "Fall pastures were good in the earlier stages, but later became poorer, and in many cases they were over-stocked.

"Cattle, while on the whole thrifty, do not seem to be fattening as easily as usual. There are not so many well finished beeves available, most of them being butchers' animals and stockers. Milch cows have been selling at falling prices of late owing to the lower rates paid for milk, and in some cases to the closing of condenseries. Some cows of fair quality are said to have been disposed of at sales for \$50, but good prices can yet be got for tried milkers. Good beef cattle range in price from 9 to 11 cents a lb., live weight; common cattle run around 6 cents, and canners have gone as low as 4½ cents.

"When correspondents wrote, hogs were selling at from \$15.50 to \$16.50 in a falling market. Swine raisers were greatly discouraged, and a number of them were disposing of their brood sows. Some correspondents, however, maintain that with the low price of grain it will pay farmers to continue to raise swine. The number of hogs now on hand is much smaller than was reported a year ago. Small pigs, however, are selling at last year's prices.

"Sheep generally are not in such demand for raising as they were a year or two ago, and both sheep and lambs have been selling freely at prices ranging from 8 to 12 cents a lb. A heavy drop in the price of wool has been discouraging

to growers. A correspondent in Camden Township, in the County of Kent, states that dogs have done \$1,300 worth of injury to sheep in that township.

"The milk flow was well up to the average during the early part of the fall, but fell off somewhat later. The tendency seems more and more toward selling in cream form except for town and city milk supply. The closing of a number of condenseries in September caused a good deal of annoyance and loss to some dairymen, for while some of the plants immediately started to receive cream, others remained closed, and the patrons had to seek a new outlet for their milk and its products. A number of cheese factories are making whey butter. Holsteins are still the favorite dairy cow, but several western counties are turning again to the 'dual purpose' cow—chiefly shorthorn grades."

Taking the situation as a whole the fodder outlook, as summed up in the December bulletin, was most encouraging: "Hay is the only item of home-grown feed that is scarce. It is selling at from \$20 to \$25 in the barn, and at from \$25 to \$35 a ton on the market—mainly around \$28 to \$30. Straw is plentiful, and of good quality, and is selling at about one-third the price of hay, while last year it was so scarce that it was worth about one-half the value of hay. Wheat is in fair quantity, while there is an abundance of barley and oats on hand, especially the latter. Corn and roots are also more in evidence than usual. The general opinion is that more live stock than is now being handled could be carried over if the price of animals in the finished state warranted the feeding of them. Mill feeds and other concentrates are still high in price, oil cake and cottonseed meal costing from \$62 to \$73 a ton, bran \$38 to \$42, and shorts \$40 to \$50."

POULTRY.—The December bulletin had the following regarding poultry: "Comparatively little disease has been reported, although some complain that turkeys have not done so well as the other fowl. Correspondents are greatly divided regarding the profits of poultry keeping. Some claim that most flocks are kept at a loss, while others hold equally as strongly that chickens and eggs pay as well as anything else on the farm, especially as they utilize so much waste stuff. One correspondent sums up the situation well when he says: 'It all depends upon the skill and attention used in handling the flocks.' Eggs are now touching their highest known price, and with grain cheaper than for years there is a nice profit for those who have good winter layers. Several correspondents credit the school fairs with helping to improve poultry and the methods of raising them."

STATISTICS OF LIVE STOCK.

STATISTICS.—The following table gives the total number and value of the several classes of live stock and poultry on hand June 15, 1920, together with live stock sold or slaughtered in the year preceding that date.

Live Stock.	On hand, June 15, 1920.		Sold or slaughtered in year ending June 15, 1920.	
	No.	Value.	No.	Value.
Horses (all ages)	704,640	\$ 89,606,594	76,548	\$ 10,647,026
Cattle:				
Milch cows	1,170,010	100,429,918	1,018,770	63,355,503
Other cattle	1,711,817	76,467,572		
Sheep and lambs	1,129,084	16,191,741	493,694	6,131,024
Swine (all ages)	1,614,356	32,253,804	2,101,007	64,079,147
Poultry (all kinds)	11,005,645	11,787,708	6,253,837	8,001,147
Totals:				
1920		326,737,337		152,213,847
1919		339,607,932		149,727,250
1918		324,107,476		126,742,038
1917		289,676,977		114,740,881
1916		263,869,539		99,159,081
1915		254,982,332		93,762,223
1914		250,870,078		93,017,235
1913		237,591,885		89,651,016
1912		225,848,942		84,982,339

The values for the several classes of horses on hand June 15th, 1920, were as follows: Stallions, \$1,183,465; mares, \$47,683,656; geldings, \$34,609,721; colts and fillies, \$6,129,752.

The values for the several classes of "other cattle" on hand were as follows: Bulls, \$7,074,436; calves, \$15,662,280; steers, \$16,678,839; all other cattle (except milch cows), \$37,052,017.

The values for the several classes of poultry on hand were as follows: Turkeys \$915,078; geese, \$977,081; ducks, \$364,006; other fowls, \$9,531,543.

VALUES PER HEAD OF LIVE STOCK AND POULTRY ON HAND.

Live Stock.	1920	1919	1918	1917	1915	1910	1905	1900
Horses (all ages) . .	\$ 127	\$ 129	\$ 131	\$ 130	\$ 139	\$ 128	\$ 110	\$ 76
Cattle:—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Milch cows	85.84	88.71	83.55	75.54	60.83	40.76	35.06	31.01
Other cattle	44.67	46.37	45.52	39.55	32.18	22.43	21.29	17.93
Sheep and lambs . .	14.34	16.45	16.14	10.39	7.05	5.75	4.68	4.29
Swine (all ages) . . .	19.98	19.62	18.80	12.89	9.93	8.50	6.44	5.42
Poultry (all kinds) .	1.07	.97	.76	.63	.54	.43	34.	.29

The values per head of the various classes on hand June 15th, 1920, were as follows:

Horses: Stallions, \$303; mares, \$135.65; geldings, \$129.88; colts and fillies, \$74.08.

Cattle: Bulls, \$107.58; calves, \$23.90; steers, \$67.88; all other cattle, \$49.73.

Poultry: Turkeys, \$3.42; geese, \$2.47; ducks, \$1.17; all other fowls, 95c.

VALUES PER HEAD OF LIVE STOCK AND POULTRY SOLD OR SLAUGHTERED.

Live Stock.	1920	1919	1918	1917	1915	1910	1905	1900
	\$	\$	\$	\$	\$	\$	\$	\$
Horses (all ages) . .	139	138	136	138	146	136	119	79
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Cattle	62.19	63.12	61.68	58.56	49.90	37.44	36.23	32.12
Sheep and lambs . .	12.42	13.35	13.08	9.15	6.72	5.36	4.28	3.64
Swine (all ages) . . .	30.50	27.80	22.06	19.46	14.98	12.49	9.79	7.69
Poultry (all kinds)	1.28	1.13	.82	.67	.62	.51	.39	.37

LABOR, WAGES AND PRODUCTION.

The following appeared in the April bulletin: "Farm labor conditions were never more acute, even during the latter years of the war. The rates of wages have been steadily mounting, and are now regarded as impossible to meet by a number of correspondents. While some farmers are seeking men at any price, others bluntly state that they will have to do with what labor they can muster at home and let the remainder of the work go. Many also are 'seeding down' to conserve labor. Several correspondents point out that it is impossible for the average food producing farmer to successfully compete with manufacturers, shopkeepers, lumbermen, owners of lake vessels and even with such special crop raisers as tobacco growers and truck farmers so far as paying wages is concerned. The alluring call of urban life, with its short hours and entertaining scenes, is also referred to by correspondents. Wages for farm laborers vary greatly according to nearness to manufacturing centres and general location, and also the experience and ability of the worker. From \$40 to \$80 a month with board—and even higher—are quoted for single men for the summer, and from \$70 to \$100 a month with house, garden, milk, etc., to married men working the year round. From \$3 to \$4 a day, with board, is being offered for short term workers."

May reports were to the effect that there had been a scarcity of labor, and farmers had to make the best of the situation. Many exchanged work, and the use of improved machinery had also assisted in meeting the shortness of help. Several correspondents spoke of "Doing all we can and letting the rest go."

The August bulletin said: "There has been an insufficiency of labor, but the comparatively light hay crop helped farmers to get on with their field work fairly well, with the aid of their families and by exchanging work with neighbors. Boy and female labor from towns was much less in evidence than in recent years. Road building in different parts of the Province is said to have attracted a number of young men from the fields. Wages paid during harvest ranged from \$3 to \$5 a day, and from \$40 to \$80 a month, with board, but chiefly between \$50 and \$60 a month. Boys of fourteen years are said to have received around \$25 a month and board."

Labor conditions toward the close of the year were thus described in the December bulletin: "The long open season following the grain harvest was a boon to farmers, as it helped them to carry on fairly well with the lack of help at hand. Correspondents largely agree upon the following points in regard to the farm labor problem: That the prevailing dullness in manufacturing circles will likely send more men to seek rural employment; that this, with the decline in the cost of farm products and of living generally, will in time mean a fall in the rate of wages; that with the town and city attractions offered it is almost impossible to retain domestic servants on the farm."

TEMPERATURE OF 1920.

TABLE I.—Showing for each month the highest, lowest, mean highest, mean lowest, and mean temperature, at the principal stations in Ontario for 1920; also the annual mean for each station.

Months	Southampton.	Chatham.	London.	Woodstock.	Stoney Creek.	Toronto.	Lindsay.	Gravenhurst.	Ottawa.	Haileybury.
	°	°	°	°	°	°	°	°	°	°
January:										
Highest.....	34.1	35.0	34.0	33.8	37.0	36.6	33.5	35.0	35.0	30.0
Lowest.....	—19.4	—10.0	—16.0	—17.0	—17.0	—17.8	—26.0	—34.0	—29.0	—37.6
Daily range.....	17.3	14.3	17.4	13.9	17.4	16.6	21.6	24.7	20.9	20.4
Monthly mean.....	9.9	16.4	12.2	10.2	12.8	13.0	4.7	1.1	2.6	—4.9
February:										
Highest.....	36.7	45.3	44.0	41.8	44.0	46.0	40.2	41.0	35.0	31.7
Lowest.....	—15.2	—7.0	—18.0	—17.0	—11.0	—9.0	—20.5	—26.0	—25.0	—20.6
Daily range.....	18.8	15.9	18.1	16.7	13.5	15.6	20.9	23.5	21.6	20.8
Monthly mean.....	14.1	22.0	18.6	16.8	20.6	20.2	13.2	11.4	13.0	8.5
March:										
Highest.....	65.5	73.0	71.0	63.2	69.0	66.4	67.8	68.0	66.0	62.2
Lowest.....	—11.9	5.0	2.0	—5.5	—6.0	—1.0	—12.1	—13.0	—18.5	—20.7
Daily range.....	19.6	19.7	21.9	18.9	19.6	18.6	22.4	19.9	20.2	21.7
Monthly mean.....	29.4	36.8	34.5	32.5	34.5	33.9	29.5	28.6	29.4	23.2
April:										
Highest.....	63.8	74.0	72.0	64.0	68.0	60.0	66.4	65.0	67.0	58.8
Lowest.....	9.9	17.0	16.0	15.0	20.0	18.0	16.4	11.0	19.0	10.6
Daily range.....	14.7	16.5	19.0	16.7	15.8	14.9	18.9	17.8	16.4	15.8
Monthly mean.....	35.9	41.9	40.2	38.2	40.2	40.1	38.9	37.6	40.7	35.3
May:										
Highest.....	76.0	86.0	85.0	78.0	85.0	82.6	89.5	83.0	84.5	85.9
Lowest.....	27.4	30.0	26.0	28.8	31.0	31.0	28.5	31.0	33.0	24.5
Daily range.....	18.6	28.5	26.9	22.1	23.3	21.6	27.7	20.8	24.2	21.5
Monthly mean.....	48.1	56.5	54.0	52.8	52.8	54.4	54.0	52.4	56.5	52.8
June:										
Highest.....	83.9	95.0	94.0	86.5	93.0	92.8	88.2	84.0	87.0	89.3
Lowest.....	42.1	45.0	41.0	40.3	41.0	46.2	38.0	41.0	44.7	41.9
Daily range.....	19.2	26.0	25.1	19.4	21.1	20.6	25.2	21.6	20.6	22.1
Monthly mean.....	59.6	69.6	66.9	64.3	65.6	65.7	64.0	63.3	65.6	64.4
July:										
Highest.....	80.8	90.0	87.0	80.7	86.0	86.6	84.6	84.0	88.0	85.3
Lowest.....	42.1	46.0	42.0	43.6	47.0	43.8	41.0	45.0	46.0	39.8
Daily range.....	17.2	24.2	24.5	19.0	20.3	20.7	24.1	20.0	19.5	19.1
Monthly mean.....	61.2	69.7	66.1	63.6	66.2	66.4	63.5	64.5	65.8	63.3
August:										
Highest.....	83.9	91.0	91.0	84.0	88.0	88.7	88.1	90.0	93.0	89.8
Lowest.....	38.6	44.5	42.0	42.7	48.0	47.7	42.2	40.0	48.0	37.4
Daily range.....	17.0	25.1	23.3	19.0	16.8	19.5	24.4	22.9	22.7	22.7
Monthly mean.....	65.3	71.7	68.8	66.3	67.9	69.8	67.5	67.8	69.9	65.3
September:										
Highest.....	85.1	94.0	92.0	84.5	87.0	86.7	88.6	87.0	90.5	87.8
Lowest.....	32.1	40.0	37.0	34.5	38.0	37.2	34.2	33.0	32.0	31.0
Daily range.....	18.8	26.4	26.4	21.9	20.6	22.0	26.9	23.2	22.8	22.6
Monthly mean.....	60.6	66.5	62.5	60.3	63.3	63.8	60.4	61.4	61.8	58.7
October:										
Highest.....	78.8	82.0	80.0	77.0	81.0	81.0	79.4	81.0	75.0	79.0
Lowest.....	34.1	30.0	29.0	31.9	33.0	33.0	27.5	30.0	30.5	22.5
Daily range.....	14.1	22.8	21.2	16.7	17.0	18.8	22.5	20.0	21.5	18.7
Monthly mean.....	54.2	59.2	55.3	54.2	55.6	54.9	52.2	53.0	52.2	50.5
November:										
Highest.....	54.0	62.0	60.0	56.4	60.0	62.4	55.4	53.0	52.0	43.5
Lowest.....	5.5	20.0	18.0	15.0	20.0	19.7	15.0	8.0	13.0	4.9
Daily range.....	10.7	13.7	12.5	11.3	11.9	10.5	12.7	10.9	12.9	11.3
Monthly mean.....	35.6	39.4	36.0	34.1	37.3	36.7	32.8	32.9	31.7	26.5
December:										
Highest.....	51.2	55.0	52.0	49.0	54.0	50.7	46.1	45.0	42.0	41.9
Lowest.....	5.5	5.0	2.0	1.0	5.0	9.6	—0.9	—6.0	—8.5	—27.0
Daily range.....	11.3	10.2	11.2	9.6	10.1	10.3	12.9	11.8	11.5	11.5
Monthly mean.....	30.1	32.0	30.6	29.1	32.3	31.5	24.4	24.1	21.3	16.7
Annual mean.....	42.0	48.5	45.5	43.5	45.8	45.9	42.1	41.7	42.5	38.4

AVERAGE TEMPERATURE FOR THIRTY-NINE YEARS.

TABLE II.—Showing for each month the monthly average for the highest, lowest, mean daily range and the mean temperature at the principal stations in Ontario, derived from the thirty-nine years, 1882-1920; also the annual mean at each station for the same period.

Months.	Southampton.	Chatham.	London.	Woodstock.	Stoney Creek.	Toronto.	Lindsay.	Gravenhurst.	Ottawa.	Haileybury.
January:	°	°	°	°	°	°	°	°	°	°
Highest.....	44.6	45.8	46.1	45.9	49.8	45.1	41.4	41.0	39.9	37.8
Lowest.....	— 6.8	— 8.6	—10.0	—10.9	— 4.7	— 7.2	—20.1	—27.1	—21.4	—33.4
Daily range.....	14.7	12.2	15.2	16.1	14.4	14.6	17.9	20.5	18.0	23.3
Monthly mean.....	20.9	21.5	21.3	20.1	24.7	22.2	15.8	14.1	11.2	6.8
February:										
Highest.....	43.8	48.1	46.3	45.3	47.9	44.9	41.7	42.0	40.1	40.7
Lowest.....	—12.4	—10.5	—11.5	—12.1	— 6.7	— 8.1	—18.5	—27.5	—20.6	—33.7
Daily range.....	17.0	14.0	16.9	17.0	15.5	15.3	19.7	22.3	18.7	23.1
Monthly mean.....	18.7	20.2	20.1	19.0	22.4	21.0	15.2	13.5	12.5	9.5
March:										
Highest.....	54.6	59.2	59.5	57.0	60.3	56.8	52.8	51.6	49.1	51.5
Lowest.....	— 2.8	— 0.3	— 0.2	— 0.9	5.1	4.0	— 6.6	—13.3	— 8.4	—22.7
Daily range.....	17.1	15.2	17.8	17.3	15.3	14.8	18.6	21.2	17.7	25.5
Monthly mean.....	27.0	29.9	29.8	28.1	32.3	29.8	25.4	23.6	24.2	20.4
April:										
Highest.....	72.4	76.6	76.1	74.2	76.5	70.7	73.9	71.2	73.1	72.9
Lowest.....	16.1	18.5	18.4	17.3	22.9	20.9	14.1	10.8	15.2	6.5
Daily range.....	17.7	18.2	20.6	20.1	17.3	16.7	21.1	21.1	19.2	23.9
Monthly mean.....	40.3	43.6	43.2	42.2	44.1	42.7	41.5	39.4	41.2	38.6
May:										
Highest.....	80.1	82.9	83.2	80.8	84.7	80.1	82.8	81.3	82.9	84.5
Lowest.....	28.3	29.5	29.3	29.1	33.1	32.1	28.1	26.8	31.1	24.2
Daily range.....	19.6	20.9	23.1	21.9	20.3	19.2	23.8	22.9	22.0	25.9
Monthly mean.....	51.0	55.2	55.1	53.8	54.8	53.8	53.9	52.2	54.9	51.9
June:										
Highest.....	85.4	88.5	88.6	86.5	91.2	87.5	88.7	86.8	87.7	89.6
Lowest.....	37.6	38.1	38.1	38.4	41.8	42.3	38.6	36.1	41.7	34.0
Daily range.....	20.0	21.9	23.4	22.7	21.4	20.2	24.8	24.1	21.4	26.6
Monthly mean.....	60.6	64.7	64.8	63.4	65.3	64.0	63.6	62.3	64.6	61.8
July:										
Highest.....	87.4	92.5	92.4	89.8	92.5	91.5	91.9	89.4	91.3	91.8
Lowest.....	43.8	43.8	43.8	44.3	48.3	48.5	44.1	42.7	48.0	40.8
Daily range.....	20.1	22.2	23.3	23.0	21.6	20.5	24.6	23.2	20.6	25.2
Monthly mean.....	66.4	69.3	69.3	67.6	71.4	69.2	67.9	66.7	68.8	65.8
August:										
Highest.....	86.2	90.6	90.9	88.5	93.1	89.0	90.0	88.1	88.8	88.5
Lowest.....	41.8	42.5	40.9	41.7	45.9	46.3	40.4	38.4	43.7	37.7
Daily range.....	18.2	21.1	23.6	23.7	21.3	22.0	24.2	22.8	20.6	24.0
Monthly mean.....	64.7	67.1	66.7	65.1	69.1	65.9	65.5	64.4	66.0	62.9
September:										
Highest.....	84.7	87.3	86.9	85.2	89.7	85.2	85.9	83.6	84.1	83.5
Lowest.....	34.4	34.4	32.1	31.9	36.4	36.6	31.6	30.7	33.3	29.4
Daily range.....	18.2	19.9	22.6	22.1	20.7	18.9	23.0	21.9	20.2	22.8
Monthly mean.....	59.1	61.2	60.5	59.0	62.6	60.4	58.2	57.5	58.1	55.5
October:										
Highest.....	74.5	76.1	76.2	74.5	77.7	73.6	74.4	72.5	71.4	73.1
Lowest.....	26.0	25.7	24.0	24.1	26.8	26.9	21.8	21.8	24.8	18.4
Daily range.....	16.2	16.9	20.1	19.3	18.9	16.5	19.7	18.8	17.2	19.4
Monthly mean.....	48.3	49.4	48.6	47.3	50.9	48.7	46.5	46.1	46.0	43.5
November:										
Highest.....	60.8	62.7	62.1	61.2	65.0	60.3	59.1	58.5	57.5	55.5
Lowest.....	14.2	14.3	13.2	12.0	17.4	15.6	6.4	6.9	7.2	— 0.2
Daily range.....	13.4	12.3	14.8	14.8	14.1	12.9	15.1	24.6	12.2	14.6
Monthly mean.....	36.7	37.3	36.8	35.6	39.4	37.6	33.8	33.3	32.6	29.5
December:										
Highest.....	49.1	49.1	52.6	49.1	53.3	48.5	45.2	44.6	42.6	43.5
Lowest.....	0.4	0.1	— 2.0	— 3.0	— 0.6	— 0.6	—13.2	—15.0	—15.2	—24.9
Daily range.....	12.6	10.8	13.3	13.7	12.8	12.6	15.8	16.8	14.9	18.9
Monthly mean.....	26.7	26.6	26.3	25.1	29.0	27.3	21.2	20.7	17.6	14.1
Annual mean.....	43.4	45.5	45.2	43.9	47.2	45.2	42.4	41.2	41.5	38.4

RAIN AND SNOW.

TABLE III.—Summary of the total fall of rain and snow, and the number of days on which rain and snow fell in Ontario during 1920, at stations reporting the whole year, and the average for the province.

Stations.	Rain.		Snow.		Stations.	Rain.		Snow.	
	Inches	Days	Inches	Days		Inches	Days	Inches	Days
ALGOMA:					NORTHUMBERLAND:				
Biscotasing.....	14.17	64	81.2	63	Healey Falls.....	18.85	64	56.8	29
Kapuskasing.....	12.34	38	46.3	27	OXFORD:				
Steep Hill Falls.....	21.92	84	106.3	80	Woodstock.....	22.61	102	57.2	70
BRANT:					PARRY SOUND:				
Paris.....	27.24	81	84.7	41	Emsdale.....	24.64	70	78.8	44
BRUCE:					Parry Sound.....	21.07	68	99.8	45
Southampton.....	23.00	93	107.3	81	PEEL:				
Walkerton.....	22.15	63	113.0	35	Alton.....	24.77	67	72.3	38
Wiarton.....	23.88	61	158.0	42	PERTH:				
CARLETON:					Stratford.....	29.85	89	66.1	37
Ottawa.....	27.97	93	81.6	54	PETERBOROUGH:				
DUNDAS:					Peterborough.....	22.25	75	85.2	41
Morrisburg.....	29.71	72	141.0	49	PRESCOTT:				
ELGIN:					Vankleek Hill.....	18.12	60	84.0	27
Port Stanley.....	30.89	128	111.5	74	PRINCE EDWARD:				
ESSEX:					Bloomfield.....	18.39	59	85.7	25
Harrow.....	23.78	75	40.4	24	RAINY RIVER:				
Leamington.....	24.39	66	28.5	11	Dryden.....	17.23	43	53.8	25
FRONTENAC:					Fort Frances.....	18.54	56	36.0	22
Kingston.....	21.18	91	63.1	48	Kenora.....	18.05	37	89.5	39
GREY:					Mine Centre.....	16.22	63	56.2	57
Eugenia.....	25.21	66	122.5	43	Sioux Lookout.....	15.51	49	47.2	31
Meaford.....	21.56	73	124.5	51	RENFREW:				
Owen Sound.....	23.79	63	129.0	50	Clontarf.....	22.53	73	72.7	33
HALTON:					Renfrew.....	19.69	82	60.6	33
Georgetown.....	23.13	87	47.1	36	Stonecliffe.....	17.45	92	61.9	43
HASTINGS:					SIMCOE:				
Queensboro.....	15.26	70	89.4	24	Barrie.....	20.89	110	125.5	74
HURON:					Beeton.....	15.37	62	75.9	39
Clinton.....	25.06	88	56.4	51	SUDBURY:				
Lucknow.....	27.97	83	91.7	54	Sudbury.....	19.22	68	70.1	41
KENT:					Wawa.....	11.86	51	148.5	59
Chatham.....	25.10	61	36.5	11	THUNDER BAY:				
Wallaceburg.....	24.51	60	31.3	21	Kakabeka Falls.....	25.42	85	56.0	29
LANARK:					Port Arthur.....	19.64	67	30.6	23
Almonte.....	23.47	93	73.6	34	Schreiber.....	15.60	64	74.3	30
LEEDS:					VICTORIA:				
Brockville.....	17.39	51	47.0	17	Lindsay.....	19.30	87	84.6	59
Westport.....	21.50	60	88.6	33	WATERLOO:				
LINCOLN:					Kitchener.....	27.82	64	72.3	33
Grantham.....	21.08	74	63.0	34	WELLAND:				
Grimsby.....	23.06	87	77.0	40	Niagara Falls.....	24.46	73	48.1	25
MANITOULIN:					Welland.....	23.39	98	52.4	27
Gore Bay.....	18.94	69	74.0	40	WELLINGTON:				
Providence Bay.....	22.97	50	121.3	29	Elora.....	26.73	96	81.2	48
MIDDLESEX:					Guelph.....	25.02	74	77.3	44
London.....	26.95	84	98.3	51	Mount Forest.....	28.23	87	108.0	55
Lucan.....	23.68	90	94.6	68	WENTWORTH:				
MUSKOKA:					Stoney Creek.....	20.44	59	31.2	18
Beatrice.....	23.32	60	132.0	47	YORK:				
Gravenhurst.....	24.84	64	99.3	36	Toronto.....	22.46	99	74.4	56
NIPISSING:					Wexford.....	18.53	73	53.4	31
Algonquin Park.....	26.71	78	104.3	61	Average for the				
Haileybury.....	16.29	79	94.6	70	Province: 1920..	21.51	71	75.9	40
Iroquois Falls.....	14.52	71	116.1	62	1919..	25.64	83	58.3	33
Montreal River.....	18.36	80	97.6	59	1882-1920..	24.17	73	73.0	39

RAIN AND SNOW.

TABLE IV.—Monthly summary of inches of rain and snow in precipitation in the several districts in Ontario in 1920, also the average derived from the thirty-nine years, 1882-1920.

Month.	West and Southwest.		North and Northwest.		Centre.		East and Northeast.		The Province.	
	Rain	Snow.	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.	Rain.	Snow.
1920	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
January.....		25.1		17.7		19.4		18.3		20.1
February.....		15.5		11.5		12.6		19.4		14.8
March.....	1.36	4.3	1.19	11.1	1.22	5.0	1.34	8.6	1.28	7.3
April.....	2.79	6.4	1.59	7.4	2.20	7.2	2.65	3.6	2.31	6.2
May.....	0.74		1.54	0.1	0.46		0.55	0.1	0.82	
June.....	3.62		2.57		2.96		2.25		2.85	
July.....	3.87		3.28		4.25		2.85		3.56	
August.....	2.49		2.39		1.48		2.16		2.13	
September.....	2.00		2.91		1.83		2.97		2.43	
October.....	3.49	0.7	1.59	2.2	3.16	1.6	2.25	0.0	2.62	1.1
November.....	2.44	8.7	0.94	7.4	1.90	10.4	1.60	14.0	1.72	10.1
December.....	2.14	19.4	1.12	22.5	1.61	10.0	2.27	13.4	1.79	16.3
The Year.....	24.94	80.1	19.12	79.9	21.07	66.2	20.89	77.4	21.51	75.9
1882-1920										
January.....	1.17	16.1	0.64	24.1	1.05	17.0	0.92	20.1	0.95	19.3
February.....	1.12	13.5	0.42	19.2	0.88	14.3	0.60	16.6	0.75	15.9
March.....	1.34	8.7	0.90	13.1	1.29	9.6	1.11	11.3	1.16	10.7
April.....	2.07	2.0	1.55	3.8	1.99	2.8	1.67	3.3	1.82	3.0
May.....	3.15		2.61	0.4	2.81		2.72	0.1	2.82	0.1
June.....	2.91		2.68		2.72		2.78		2.77	
July.....	2.63		2.86		2.82		2.83		2.79	
August.....	2.79		2.85		2.41		2.67		2.68	
September.....	2.57		3.05		2.34		2.56		2.63	
October.....	2.77	0.7	2.95	2.2	2.59	0.5	2.53	0.8	2.71	1.0
November.....	2.24	5.2	1.84	11.7	1.98	5.0	1.82	7.5	1.97	7.4
December.....	1.40	14.4	0.81	21.5	1.20	12.0	1.08	14.6	1.12	15.6
The Year.....	26.16	60.6	23.16	96.0	24.08	61.2	23.29	74.3	24.17	73.0

SUNSHINE.

TABLE V.—Monthly summary of bright sunshine at the principal stations in Ontario for 1920, showing the number of hours the sun was above the horizon, the hours of registered sunshine, the total for the year, and the average derived from the thirty-nine years, 1882-1920.

Month.	Sun above Horizon.	Woodstock	Toronto	Lindsay.	Kingston.	Ottawa.	Average of five stations.		
							1920	1919	1882- 1920
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
1920									
January.....	285.7	98.8	97.9	89.5	99.1	111.2	99.3	84.5	.....
February.....	302.5	95.7	127.5	102.3	120.3	131.3	115.4	116.6	.....
March.....	369.9	149.3	182.0	147.8	138.5	160.9	155.7	148.3	.....
April.....	406.4	134.0	147.2	113.1	153.7	180.2	145.6	139.7	.....
May.....	461.1	265.0	285.8	234.4	255.7	287.4	265.6	192.9	.....
June.....	465.7	258.1	224.1	193.7	207.8	251.4	227.0	307.0	.....
July.....	470.9	244.5	254.5	204.2	225.6	228.6	231.5	308.8	.....
August.....	434.5	199.8	232.0	206.6	242.5	254.1	227.0	210.6	.....
September.....	376.3	218.5	242.9	192.4	207.8	225.7	217.6	184.8	.....
October.....	340.2	152.9	158.9	137.0	160.8	171.9	156.3	119.6	.....
November.....	286.9	52.8	48.5	37.5	58.2	51.1	49.6	58.9	.....
December.....	274.3	43.4	46.2	37.4	49.2	60.0	47.2	75.8	.....
The Year.....	4,474.4	1,912.8	2,047.5	1,695.9	1,919.2	2,113.8	1,937.8	1,947.5	.....
1882-1920									
January.....	.....	64.7	78.3	74.9	77.9	87.2	.....	.....	76.6
February.....	.....	91.4	108.5	102.1	110.3	111.6	.....	.....	104.8
March.....	.....	127.9	155.2	147.9	147.3	153.2	.....	.....	146.3
April.....	.....	166.9	187.1	179.8	179.7	191.1	.....	.....	180.9
May.....	.....	210.5	222.7	206.9	207.0	209.7	.....	.....	211.4
June.....	.....	250.5	260.5	236.0	249.8	238.4	.....	.....	247.0
July.....	.....	273.4	283.4	252.9	270.4	257.1	.....	.....	267.4
August.....	.....	234.1	249.9	225.6	247.4	240.2	.....	.....	239.5
September.....	.....	177.2	208.1	185.4	185.8	173.4	.....	.....	186.0
October.....	.....	143.0	151.5	127.9	137.5	132.3	.....	.....	138.4
November.....	.....	76.9	84.0	71.1	80.1	84.3	.....	.....	79.3
December.....	.....	55.2	65.8	56.2	68.3	65.2	.....	.....	62.1
The Year.....	.....	1,871.7	2,055.0	1,866.7	1,961.5	1,943.7	.....	.....	1,939.7

RURAL AREA ASSESSED.

TABLE VI.—Showing by County Municipalities the rural area of Ontario as returned by Municipal assessors for 1920, also the comparative totals for the Province of the five years, 1916-1920. Only townships under municipal organization are included.

Counties and Districts	Acres of assessed land.	Acres cleared.	Acres of woodland	Acres of slash land.	Acres of swamp, marsh or waste land.	Per cent. cleared.
Algoma.....	317,825	55,563	214,599	13,535	34,128	17.48
Brant.....	215,202	179,440	9,489	16,898	9,375	83.38
Bruce.....	930,492	579,900	74,263	154,805	121,524	63.32
Carleton.....	563,519	383,169	59,011	82,851	38,488	68.00
Dufferin.....	356,316	283,005	16,646	25,883	30,782	79.43
Dundas.....	235,711	179,175	19,415	32,154	4,967	76.01
Durham.....	375,795	314,545	21,574	7,381	32,295	83.70
Elgin.....	435,794	362,561	45,446	22,364	5,423	83.20
Essex.....	425,023	367,559	19,516	29,251	8,697	86.48
Frontenac.....	694,204	257,999	73,754	170,902	191,549	37.16
Glengarry.....	287,679	200,033	53,205	20,090	14,351	69.53
Grenville.....	273,160	187,991	32,693	16,803	35,673	68.82
Grey.....	1,061,608	703,418	99,495	96,771	161,924	66.26
Haldimand.....	282,056	243,610	28,727	7,740	1,979	86.37
Haliburton.....	587,856	49,281	408,441	62,465	67,669	8.38
Halton.....	225,102	174,076	17,338	26,603	7,085	77.33
Hastings.....	1,081,616	446,981	234,354	218,299	181,982	41.33
Huron.....	799,151	672,381	46,127	31,659	48,984	84.14
Kenora.....	75,553	6,189	18,011	38,505	12,848	8.19
Kent.....	569,338	486,650	24,834	43,022	14,832	85.48
Lambton.....	658,445	525,598	59,866	69,757	3,224	79.82
Lanark.....	670,969	336,764	172,915	42,973	118,317	50.19
Leeds.....	467,823	269,798	103,357	35,514	59,154	57.67
Lennox and Addington.....	448,271	256,379	103,648	40,003	48,241	57.19
Lincoln.....	189,923	164,135	13,864	10,461	1,463	86.42
Manitoulin.....	312,243	50,450	55,730	89,462	116,601	16.16
Middlesex.....	756,676	670,964	55,339	17,443	12,930	88.67
Muskoka.....	574,693	72,731	324,791	82,058	95,113	12.66
Nipissing.....	328,619	65,505	183,139	22,454	57,521	19.93
Norfolk.....	396,220	282,551	59,472	31,773	22,424	71.31
Northumberland.....	438,423	355,509	36,935	18,801	27,178	81.09
Ontario.....	509,049	386,252	23,248	55,524	44,025	75.88
Oxford.....	471,350	401,096	30,327	21,876	18,051	85.10
Parry Sound.....	646,598	92,155	373,995	97,900	82,548	14.25
Peel.....	288,190	264,263	7,412	5,805	10,710	91.70
Perth.....	518,192	456,206	31,444	17,973	12,569	88.04
Peterborough.....	586,069	268,580	139,823	105,776	71,890	45.83
Prescott.....	292,200	218,693	28,193	38,248	7,066	74.84
Prince Edward.....	234,701	198,367	18,416	4,014	13,904	84.52
Rainy River.....	318,587	41,148	160,321	63,344	53,774	12.92
Renfrew.....	1,073,687	387,872	372,407	180,928	132,480	36.13
Russell.....	251,625	160,418	15,570	72,982	2,655	63.75
Simcoe.....	967,478	687,471	80,058	157,983	41,966	71.06
Stormont.....	247,274	166,862	30,901	37,837	11,674	67.48
Sudbury.....	394,575	62,874	148,589	47,948	135,164	15.93
Thunder Bay.....	463,159	38,273	315,812	60,694	48,380	8.26
Timiskaming.....	376,497	51,289	219,281	50,710	55,217	13.62
Victoria.....	597,986	290,998	60,060	147,122	99,806	48.66
Waterloo.....	306,874	253,998	31,605	5,729	15,542	82.77
Welland.....	225,066	185,561	14,959	10,249	14,297	82.45
Wellington.....	627,429	507,572	31,307	16,006	72,544	80.90
Wentworth.....	269,541	214,509	14,441	13,160	27,431	79.58
York.....	532,761	442,809	23,810	29,561	36,581	83.12
The Province:						
1920.....	25,234,193	14,961,176	4,857,973	2,820,049	2,594,995	59.29
1919.....	25,118,641	14,897,839	4,900,048	2,756,686	2,564,068	59.31
1918.....	25,157,793	14,798,693	4,937,440	2,772,100	2,649,560	58.82
1917.....	25,045,029	14,728,014	4,835,474	2,751,208	2,730,333	58.81
1916.....	25,088,035	14,698,648	4,830,938	2,794,701	2,763,748	58.59

Statistics from Municipal Assessors are furnished by the Bureau of Municipal Affairs.

FALL WHEAT AND SPRING WHEAT.

TABLE VII.—Showing by County Municipalities of Ontario the area, produce and market value of Fall Wheat and Spring Wheat for the year 1920, together with the comparative totals for the Province for 1919, and the annual average for various periods.

Counties and Districts.	Fall Wheat.				Spring Wheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	406	11,327	27.9	21,386	2,574	46,847	18.2	86,299
Brant.....	19,939	380,835	19.1	750,290	740	7,696	10.4	14,404
Bruce.....	23,760	679,536	28.6	1,247,878	5,622	73,086	13.0	127,219
Carleton.....	170	3,400	20.0	5,852	7,553	169,943	22.5	290,625
Dufferin.....	2,494	60,355	24.2	110,481	8,552	130,846	15.3	225,311
Dundas.....	346	8,269	23.9	15,370	2,235	48,053	21.5	88,947
Durham.....	5,431	146,094	26.9	284,256	13,476	199,445	14.8	375,264
Elgin.....	35,151	678,414	19.3	1,312,713	653	8,685	13.3	15,828
Essex.....	55,392	1,113,379	20.1	2,160,879	3,233	45,909	14.2	89,003
Frontenac.....	1,300	30,420	23.4	58,565	2,134	30,546	19.0	57,594
Glenarry.....	126	2,772	22.0	5,128	5,084	109,306	21.5	195,650
Grenville.....	151	3,307	21.9	6,240	815	17,278	21.2	32,561
Grey.....	21,928	603,020	27.5	1,103,835	11,106	144,378	13.0	256,862
Haldimand.....	27,942	447,072	16.0	842,812	1,016	17,475	17.2	31,244
Haliburton.....	17	298	17.5	553	532	9,363	17.6	17,626
Halton.....	11,752	189,207	16.1	359,645	3,497	53,504	15.3	97,929
Hastings.....	8,830	177,483	20.1	344,464	5,335	96,564	18.1	186,731
Huron.....	25,616	732,618	28.6	1,373,966	9,674	84,164	8.7	151,228
Kent.....	85,377	2,117,350	24.8	4,099,080	1,770	29,913	16.9	58,051
Lambton.....	64,929	1,681,661	25.9	3,281,876	653	11,297	17.3	21,623
Lanark.....	963	21,764	22.6	39,372	8,359	168,852	20.2	307,722
Leeds.....	1,441	37,466	26.0	72,203	2,491	51,813	20.8	97,437
Lennox & Add....	2,444	46,680	19.1	92,648	5,542	101,419	18.3	201,914
Lincoln.....	16,988	400,917	23.6	767,152	332	5,611	16.9	10,684
Manitoulin.....	133	3,352	25.2	6,395	2,446	38,402	15.7	69,682
Middlesex.....	60,638	1,576,588	26.0	3,144,543	1,661	21,593	13.0	42,287
Muskoka.....	19	314	16.5	584	651	11,523	17.7	21,227
Nipissing.....					2,005	35,890	17.9	67,847
Norfolk.....	32,336	617,618	19.1	1,172,764	224	3,606	16.1	6,859
Northumberland..	10,937	285,456	26.1	562,382	7,604	126,226	16.6	244,463
Ontario.....	10,075	308,295	30.6	588,416	15,970	269,893	16.9	499,041
Oxford.....	27,759	824,442	29.7	1,659,662	1,011	12,739	12.6	25,048
Parry Sound.....	36	792	22.0	1,502	1,872	32,947	17.6	61,991
Peel.....	11,633	237,313	20.4	460,584	7,308	105,966	14.5	190,507
Perth.....	18,784	606,723	32.3	1,177,546	4,949	50,975	10.3	95,410
Peterborough.....	10,992	263,808	24.0	504,538	7,557	145,850	19.3	274,710
Prescott.....	140	2,800	20.0	5,084	3,238	62,493	19.3	113,213
Prince Edward....	6,000	144,600	24.1	285,303	2,071	37,899	18.3	73,922
Rainy R. & Kenora	20	474	23.7	893	2,434	46,733	19.2	86,687
Renfrew.....	448	8,870	19.8	15,587	36,627	688,588	18.8	1,219,635
Russell.....	136	2,720	20.0	5,045	3,633	74,840	20.6	141,699
Simcoe.....	56,384	1,601,306	28.4	3,087,539	14,583	234,786	16.1	435,284
Stormont.....	84	1,730	20.6	3,125	1,910	35,335	18.5	64,396
Sudbury.....	30	600	20.0	1,172	2,959	50,895	17.2	93,003
Thunder Bay.....	20	540	27.0	1,054	775	15,655	20.2	30,844
Timiskaming.....	59	1,180	20.0	2,327	1,385	34,348	24.8	66,691
Victoria.....	7,595	212,660	28.0	398,204	9,036	149,094	16.5	264,077
Waterloo.....	21,585	533,150	24.7	1,019,659	1,142	16,102	14.1	29,012
Welland.....	23,323	529,432	22.7	1,051,830	522	6,943	13.3	13,775
Wellington.....	5,706	162,050	28.4	300,589	9,967	123,591	12.4	220,124
Wentworth.....	18,420	300,246	16.3	569,829	663	8,089	12.2	15,068
York.....	26,186	691,310	26.4	1,376,810	20,186	377,478	18.7	732,924
The Province:								
1920.....	762,371	18,492,013	24.3	35,759,610	267,367	4,480,472	16.8	8,237,182
1919.....	619,494	15,051,703	24.3	35,698,096	361,150	5,646,544	15.6	13,603,841
Annual Averages:								
1912-1920....	659,844	15,442,331	23.4	22,836,086	203,068	3,798,594	18.7	6,650,004
1902-1911....	720,272	16,912,017	23.5	14,142,444	182,335	2,269,976	17.9	2,655,591
1892-1901....	930,794	18,688,313	20.1	12,650,091	356,355	5,405,846	15.2	3,650,840
1882-1891....	902,846	18,059,235	20.0	16,250,884	563,547	8,882,998	15.8	7,959,306
1882-1920....	807,121	17,317,349	21.5	16,306,640	329,487	5,378,860	16.3	5,192,498

BARLEY AND OATS.

TABLE VIII.—Showing by County Municipalities of Ontario the area, produce and market value of Barley and Oats for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Barley.				Oats.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	1,002	34,669	34.6	33,502	12,283	565,018	46.0	377,796
Brant.....	6,329	211,389	33.4	195,593	32,483	1,445,494	44.5	845,886
Bruce.....	21,071	766,984	36.4	679,720	109,936	4,727,248	43.0	2,583,159
Carleton.....	8,384	302,662	36.1	300,959	89,145	4,394,849	49.3	2,519,416
Dufferin.....	12,336	415,723	33.7	344,278	66,624	2,858,170	42.9	1,578,858
Dundas.....	4,795	167,825	35.0	184,863	30,677	1,285,366	41.9	859,452
Durham.....	5,313	150,358	28.3	144,844	56,345	2,293,242	40.7	1,353,370
Elgin.....	5,732	213,804	37.3	198,899	55,664	2,811,032	50.5	1,642,189
Essex.....	10,487	368,094	35.1	345,749	69,904	3,348,402	47.9	1,793,108
Frontenac.....	6,272	180,006	28.7	176,289	42,334	1,587,525	37.5	1,028,367
Glengarry.....	4,712	163,506	34.7	158,329	42,996	1,784,334	41.5	1,054,808
Grenville.....	2,041	67,353	33.0	67,446	37,715	1,568,944	41.6	1,050,624
Grey.....	23,844	791,621	33.2	706,309	163,773	6,976,730	42.6	3,798,503
Haldimand.....	6,442	235,133	36.5	211,206	40,960	1,974,272	48.2	1,086,668
Haliburton.....	751	19,151	25.5	18,123	11,028	399,214	36.2	255,034
Halton.....	7,691	299,949	39.0	284,144	32,216	1,530,260	47.5	892,449
Hastings.....	19,828	630,530	31.8	671,812	86,206	3,344,793	38.8	2,306,262
Huron.....	26,575	890,263	33.5	795,213	139,603	6,184,413	44.3	3,348,691
Kent.....	10,731	418,509	39.0	400,229	75,860	3,982,650	52.5	2,112,971
Lambton.....	11,757	436,185	37.1	395,731	80,501	3,944,549	49.0	2,053,567
Lanark.....	6,191	209,875	33.9	195,244	48,005	2,150,624	44.8	1,331,167
Leeds.....	4,433	146,289	33.0	158,357	51,702	2,197,335	42.5	1,545,644
Lennox & Add.....	7,721	240,895	31.2	243,158	39,788	1,579,584	39.7	990,267
Lincoln.....	1,593	54,321	34.1	52,437	25,095	1,151,861	45.9	692,366
Manitoulin.....	1,622	52,553	32.4	49,626	7,339	302,367	41.2	184,151
Middlesex.....	13,051	442,429	33.9	378,357	107,430	5,392,986	50.2	2,904,080
Muskoka.....	1,029	25,519	24.8	24,532	15,367	542,455	35.3	366,482
Nipissing.....	755	21,442	28.4	21,342	17,153	656,960	38.3	469,901
Norfolk.....	4,102	139,468	34.0	132,119	41,962	1,749,815	41.7	1,053,525
Northumberland.....	7,751	236,406	30.5	236,023	64,910	2,635,346	40.6	1,657,377
Ontario.....	13,950	470,115	33.7	446,756	74,947	3,589,961	47.9	2,107,935
Oxford.....	11,423	458,062	40.1	439,430	79,201	4,158,053	52.5	2,590,226
Parry Sound.....	1,192	35,641	29.9	38,010	21,991	908,228	41.3	563,969
Peel.....	19,316	697,308	36.1	675,229	50,598	2,287,030	45.2	1,274,720
Perth.....	25,572	1,002,422	39.2	884,355	105,751	5,393,301	51.0	3,209,678
Peterborough.....	5,571	197,213	35.4	196,696	52,332	2,459,604	47.0	1,434,441
Prescott.....	7,166	230,029	32.1	209,846	44,447	1,800,104	40.5	1,055,187
Prince Edward.....	9,339	276,434	29.6	267,958	25,796	977,668	37.9	601,259
Rainy R. & Kenora	1,921	60,704	31.6	59,147	10,463	458,279	43.8	310,523
Renfrew.....	3,610	103,607	28.7	102,298	74,482	3,105,899	41.7	1,678,674
Russell.....	3,426	119,567	34.9	123,444	40,078	1,791,487	44.7	1,103,533
Simcoe.....	51,777	1,703,463	32.9	1,536,943	142,599	6,146,017	43.1	3,358,431
Stormont.....	3,460	103,454	29.9	104,219	30,573	1,152,602	37.7	737,472
Sudbury.....	922	28,213	30.6	29,834	13,445	533,767	39.7	348,415
Thunder Bay.....	750	23,775	31.7	21,428	6,482	291,690	45.0	188,661
Timiskaming.....	1,759	62,972	35.8	65,392	8,581	386,145	45.0	278,143
Victoria.....	10,359	337,703	32.6	318,218	68,657	2,725,683	39.7	1,502,963
Waterloo.....	10,237	379,793	37.1	354,457	57,058	2,727,372	47.8	1,628,542
Welland.....	2,131	69,258	32.5	64,291	26,521	1,058,188	39.9	665,498
Wellington.....	19,489	701,604	36.0	644,261	113,171	5,330,354	47.1	2,955,088
Wentworth.....	6,273	228,337	36.4	219,278	42,975	2,054,205	47.8	1,234,751
York.....	30,344	1,037,765	34.2	1,025,690	94,901	4,469,837	47.1	2,655,663
The Province:								
1920.....	484,328	16,660,350	34.4	15,631,613	2,880,053	129,171,312	44.9	75,159,913
1919.....	569,183	13,133,757	23.1	19,146,902	2,674,341	78,388,018	29.3	76,572,499
Annual Average:								
1912-1920.....	577,326	17,810,734	30.9	15,537,428	2,764,646	104,721,807	37.9	61,918,857
1902-1911.....	711,199	21,709,056	30.5	10,870,736	2,703,900	98,968,442	36.6	36,369,289
1892-1901.....	498,932	13,100,823	26.3	5,037,346	2,291,902	79,229,462	34.6	22,119,649
1882-1891.....	743,245	19,349,351	26.0	10,547,091	1,663,205	58,410,603	35.1	21,017,492
1882-1920.....	634,095	17,997,151	28.4	10,368,938	2,345,433	84,835,418	36.2	34,659,847

PEAS AND BEANS.

TABLE IX.—Showing by County Municipalities of Ontario the area, produce and market value of Peas and Beans for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Peas.				Beans.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	1,116	25,222	22.6	50,444	25	375	15.0	938
Brant.....	430	8,127	18.9	15,880	268	5,280	19.7	15,206
Bruce.....	6,990	150,984	21.6	277,962	117	1,697	14.5	5,193
Carleton.....	1,892	38,218	20.2	85,532	446	5,575	12.5	16,614
Dufferin.....	2,202	38,975	17.7	66,491	3	60	20.0	150
Dundas.....	316	5,246	16.6	9,181	213	3,195	15.0	10,224
Durham.....	9,285	178,272	19.2	376,154	350	6,720	19.2	19,622
Elgin.....	1,050	19,740	18.8	33,558	2,385	38,876	16.3	98,745
Essex.....	111	2,220	20.0	4,940	312	5,366	17.2	18,137
Frontenac.....	335	6,064	18.1	11,685	334	4,743	14.2	15,083
Glengarry.....	491	8,887	18.1	16,690	300	4,860	16.2	14,143
Grenville.....	215	4,472	20.8	10,062	153	2,785	18.2	8,494
Grey.....	8,903	175,389	19.7	310,439	112	1,680	15.0	5,292
Haldimand.....	685	12,741	18.6	20,602	137	2,507	18.3	7,371
Haliburton.....	132	2,099	15.9	4,013	25	375	15.0	1,125
Halton.....	290	6,148	21.2	11,312	125	1,563	12.5	5,205
Hastings.....	1,975	33,180	16.8	68,649	249	2,988	12.0	10,159
Huron.....	3,415	71,715	21.0	131,669	3,596	56,098	15.6	158,196
Kent.....	453	8,607	19.0	18,247	7,200	135,360	18.8	368,179
Lambton.....	639	13,355	20.9	26,710	255	4,667	18.3	15,074
Lanark.....	1,073	22,533	21.0	44,255	344	4,472	13.0	14,579
Leeds.....	165	2,954	17.9	5,828	230	3,749	16.3	12,372
Lennox & Add.....	920	18,216	19.8	37,306	192	3,456	18.0	11,370
Lincoln.....	205	3,834	18.7	6,671	217	4,492	20.7	15,497
Manitoulin.....	1,206	21,949	18.2	42,801	6	90	15.0	225
Middlesex.....	985	21,670	22.0	44,792	234	3,814	16.3	10,794
Muskoka.....	524	9,432	18.0	20,562	30	600	20.0	1,950
Nipissing.....	618	11,124	18.0	23,427	16	272	17.0	900
Norfolk.....	2,376	42,293	17.8	71,179	665	11,039	16.6	33,338
Northumberland..	3,952	74,693	18.9	161,412	334	5,411	16.2	16,936
Ontario.....	4,757	107,508	22.6	190,504	256	3,328	13.0	9,119
Oxford.....	534	10,466	19.6	19,885	165	2,756	16.7	8,847
Parry Sound.....	1,206	25,567	21.2	53,819	28	398	14.2	1,194
Peel.....	1,190	22,729	19.1	40,003	68	1,156	17.0	3,468
Perth.....	2,079	49,896	24.0	90,611	84	1,680	20.0	4,150
Peterborough.....	3,325	75,810	22.8	157,382	152	2,128	14.0	7,576
Prescott.....	354	6,124	17.3	13,510	397	6,114	15.4	19,320
Prince Edward....	8,284	178,106	21.5	421,043	163	2,608	16.0	8,424
Rainy R. & Kenora	190	3,857	20.3	9,643	10	150	15.0	375
Renfrew.....	11,099	204,222	18.4	361,064	418	6,813	16.3	21,802
Russell.....	735	12,569	17.1	28,909	223	3,523	15.8	11,238
Simcoe.....	7,909	166,089	21.0	286,504	442	6,807	15.4	21,510
Stormont.....	87	1,610	18.5	3,381	160	2,432	15.2	7,442
Sudbury.....	910	19,019	20.9	41,842	12	144	12.0	360
Thunder Bay.....	224	5,242	23.4	11,795	5	75	15.0	188
Timiskaming.....	772	20,226	26.2	42,879	4	40	10.0	100
Victoria.....	3,689	70,460	19.1	132,817	116	1,624	14.0	4,336
Waterloo.....	1,355	30,081	22.2	58,327	80	1,600	20.0	4,528
Welland.....	47	705	15.0	1,326	730	9,271	12.7	35,137
Wellington.....	3,608	76,490	21.2	136,917	39	546	14.0	1,365
Wentworth.....	530	10,600	20.0	19,610	141	2,115	15.0	6,620
York.....	3,354	73,788	22.0	140,714	178	3,026	17.0	8,927
The Province:								
1920.....	109,187	2,209,523	20.2	4,270,938	22,744	380,499	16.7	1,097,137
1919.....	127,253	1,816,517	14.3	4,794,268	22,920	288,480	12.6	1,154,081
Annual Average:								
1912-1920....	137,755	2,288,047	16.6	3,974,189	62,309	848,946	13.6	3,073,616
1902-1911....	389,104	7,056,642	18.1	5,275,196	50,006	854,999	17.1	1,263,012
1892-1901....	769,819	14,242,404	18.5	7,613,480	51,654	875,597	17.0	818,381
1882-1891....	668,962	13,908,658	20.8	8,573,501	26,201	469,393	17.9	545,087
1882-1920....	500,478	9,555,627	19.1	6,420,243	47,164	760,010	16.1	1,382,753

RYE AND BUCKWHEAT.

TABLE X.—Showing by County Municipalities of Ontario the area, produce and market value of Rye and Buckwheat for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Rye.				Buckwheat.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	97	2,425	25.0	3,379	44	880	20.0	935
Brant.....	4,648	86,453	18.6	127,868	2,424	42,420	17.5	46,832
Bruce.....	331	7,448	22.5	9,417	1,936	40,075	20.7	40,275
Carleton.....	1,536	26,266	17.1	35,591	5,198	120,074	23.1	123,796
Dufferin.....	7,113	123,055	17.3	171,789	2,565	61,560	24.0	59,467
Dundas.....	546	9,828	18.0	14,592	2,543	58,743	23.1	62,150
Durham.....	9,465	133,457	14.1	193,570	7,093	156,046	22.0	159,635
Elgin.....	4,149	75,097	18.1	104,050	1,860	36,084	19.4	38,574
Essex.....	2,135	38,857	18.2	54,320	527	13,175	25.0	14,743
Frontenac.....	541	8,007	14.8	10,697	1,468	32,736	22.3	34,929
Glengarry.....	27	486	18.0	580	1,398	34,950	25.0	35,684
Grenville.....	349	6,806	19.5	8,832	4,583	96,243	21.0	102,306
Grey.....	613	10,482	17.1	12,423	3,071	63,877	20.8	69,626
Haldimand.....	631	11,106	17.6	14,572	1,463	34,966	23.9	37,903
Haliburton.....	188	3,140	16.7	4,180	465	9,393	20.2	10,426
Halton.....	548	10,905	19.9	16,087	702	14,040	20.0	16,651
Hastings.....	5,555	92,769	16.7	133,050	5,848	114,621	19.6	124,478
Huron.....	975	14,625	15.0	17,444	2,804	62,249	22.2	65,361
Kent.....	1,185	28,914	24.4	39,730	235	5,476	23.3	6,281
Lambton.....	544	10,880	20.0	14,275	348	8,700	25.0	10,875
Lanark.....	939	16,996	18.1	21,976	4,910	115,876	23.6	120,511
Leeds.....	683	11,816	17.3	16,168	3,800	86,640	22.8	100,242
Lennox & Add....	960	15,840	16.5	20,647	3,833	77,043	20.1	82,051
Lincoln.....	345	6,831	19.8	10,345	101	1,980	19.6	2,283
Manitoulin.....	31	620	20.0	851	42	840	20.0	840
Middlesex.....	1,192	26,462	22.2	34,770	1,366	31,555	23.1	37,393
Muskoka.....	139	2,516	18.1	3,661	111	2,242	20.2	2,648
Nipissing.....	134	2,372	17.7	3,407	10	210	21.0	221
Norfolk.....	16,588	267,067	16.1	384,812	6,106	119,067	19.5	128,592
Northumberland..	14,466	235,796	16.3	355,054	14,303	348,993	24.4	385,986
Ontario.....	9,290	188,587	20.3	277,310	8,111	191,420	23.6	190,846
Oxford.....	2,760	50,232	18.2	68,160	1,679	34,587	20.6	37,769
Parry Sound.....	232	4,547	19.6	7,224	104	2,080	20.0	2,323
Peel.....	4,419	76,449	17.3	107,600	1,658	36,642	22.1	36,019
Perth.....	100	2,400	24.0	3,550	698	14,518	20.8	14,721
Peterborough.....	3,598	61,526	17.1	86,362	3,970	90,913	22.9	91,368
Prescott.....	84	1,344	16.0	1,283	1,913	41,321	21.6	43,842
Prince Edward....	4,030	70,122	17.4	96,019	5,186	106,832	20.6	108,541
Rainy R. & Kenora	60	1,128	18.8	1,451	14	280	20.0	280
Renfrew.....	5,444	87,648	16.1	113,745	2,252	48,868	21.7	49,992
Russell.....	170	3,060	18.0	4,380	1,012	23,782	23.5	26,945
Simcoe.....	15,660	327,294	20.9	464,720	9,872	210,274	21.3	214,690
Stormont.....	65	780	12.0	1,129	2,320	58,000	25.0	62,756
Sudbury.....	60	1,080	18.0	1,546	81	1,620	20.0	1,782
Thunder Bay.....	70	1,400	20.0	2,137	3	60	20.0	60
Timiskaming.....	20	300	15.0	429	27	675	25.0	675
Victoria.....	1,536	25,805	16.8	32,381	5,247	123,829	23.6	126,058
Waterloo.....	1,815	37,026	20.4	54,198	1,880	45,120	24.0	46,789
Welland.....	392	7,291	18.6	9,559	1,125	17,438	15.5	19,339
Wellington.....	784	15,131	19.3	20,575	4,297	111,292	25.9	113,407
Wentworth.....	1,161	20,666	17.8	28,258	1,492	30,735	20.6	34,423
York.....	4,687	78,742	16.8	116,087	9,106	209,438	23.0	222,842
The Province:								
1920.....	133,090	2,349,880	17.7	3,336,240	143,204	3,190,478	22.3	3,367,161
1919.....	140,072	2,219,042	15.8	3,531,031	178,569	4,071,959	22.8	5,727,413
Annual Average:								
1912-1920....	133,859	2,256,007	16.9	2,569,422	192,555	4,007,967	20.8	3,859,431
1902-1911....	112,424	1,877,432	16.7	1,129,754	131,168	2,871,668	21.9	1,503,428
1892-1901....	129,188	2,088,786	16.2	937,885	131,005	2,450,389	18.7	949,189
1882-1891....	103,636	1,683,211	16.2	1,010,057	69,230	1,413,900	20.4	586,472
1882-1920....	119,415	1,969,188	16.5	1,382,097	129,411	2,652,084	20.5	1,669,891

FLAX AND MIXED GRAINS.

TABLE XI.—Showing by County Municipalities of Ontario the area, produce, and market value of Flax and Mixed Grains for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Flax.				Mixed Grains.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	20	160	8.0	339	785	35,168	44.8	30,385
Brant.....	47	470	10.0	1,122	9,479	430,347	45.4	343,847
Bruce.....	653	7,444	11.4	17,529	22,616	952,134	42.1	737,904
Carleton.....	274	2,740	10.0	5,812	8,958	412,068	46.0	312,348
Dufferin.....	171	1,761	10.3	4,670	19,747	799,754	40.5	609,413
Dundas.....	8	80	10.0	170	10,119	439,165	43.4	343,427
Durham.....	211	2,110	10.0	4,476	26,996	1,058,243	39.2	823,313
Elgin.....	23	230	10.0	488	9,965	508,215	51.0	363,374
Essex.....	345	3,450	10.0	6,404	4,586	201,784	44.0	139,029
Frontenac.....	50	600	12.0	1,272	3,370	121,320	36.0	103,122
Glengarry.....	10	80	8.0	170	1,715	63,970	37.3	54,375
Grenville.....	75	750	10.0	1,591	4,002	171,286	42.8	142,339
Grey.....	600	5,280	8.8	13,665	33,913	1,431,129	42.2	1,103,400
Haldimand.....	360	4,140	11.5	10,539	6,032	284,710	47.2	225,490
Haliburton.....	10	120	12.0	255	400	13,600	34.0	10,880
Halton.....	17	170	10.0	361	10,116	488,603	48.3	406,029
Hastings.....	206	2,060	10.0	4,370	8,950	323,990	36.2	255,952
Huron.....	5,970	65,670	11.0	149,061	31,557	1,366,418	43.3	1,022,081
Kent.....	813	9,756	12.0	17,591	8,874	442,813	49.9	315,283
Lambton.....	2,065	21,889	10.6	52,471	7,896	359,268	45.5	260,110
Lanark.....	134	1,340	10.0	2,843	5,891	256,848	43.6	205,478
Leeds.....	65	696	10.7	1,476	3,496	130,750	37.4	112,707
Lennox & Add....	43	430	10.0	912	6,578	237,466	36.1	216,332
Lincoln.....	87	870	10.0	1,846	3,412	142,963	41.9	117,659
Manitoulin.....	47	282	6.0	598	1,185	48,467	40.9	43,620
Middlesex.....	1,970	13,790	7.0	32,179	15,014	717,669	47.8	564,088
Muskoka.....	13	156	12.0	331	609	20,158	33.1	17,134
Nipissing.....					579	22,523	38.9	18,401
Norfolk.....	143	1,430	10.0	3,034	3,525	139,590	39.6	106,507
Northumberland..	83	830	10.0	1,761	13,617	525,616	38.6	467,798
Ontario.....	523	4,969	9.5	11,226	34,642	1,593,532	46.0	1,394,341
Oxford.....	306	3,060	10.0	8,114	23,133	1,228,362	53.1	1,017,084
Parry Sound.....	24	168	7.0	356	816	28,234	34.6	23,999
Peel.....	146	1,460	10.0	3,484	12,020	492,820	41.0	435,160
Perth.....	1,670	22,044	13.2	48,400	22,422	1,145,764	51.1	868,489
Peterborough.....	33	264	8.0	560	5,727	262,297	45.8	216,395
Prescott.....	36	360	10.0	764	811	29,845	36.8	22,085
Prince Edward....	37	370	10.0	785	3,764	137,386	36.5	126,533
Rainy R. & Kenora	158	1,580	10.0	3,352	304	12,586	41.4	11,076
Renfrew.....	203	2,395	11.8	5,081	3,990	152,418	38.2	129,555
Russell.....	96	1,152	12.0	2,444	1,734	78,550	45.3	64,411
Simcoe.....	446	4,460	10.0	10,644	33,168	1,323,403	39.9	1,152,684
Stormont.....	17	170	10.0	361	5,391	200,545	37.2	161,439
Sudbury.....	53	424	8.0	899	307	12,065	39.3	10,859
Thunder Bay.....	20	200	10.0	424	405	17,820	44.0	15,147
Timiskaming.....	20	200	10.0	424	812	32,480	40.0	29,232
Victoria.....	141	1,692	12.0	3,589	14,625	564,525	38.6	429,039
Waterloo.....	537	6,981	13.0	17,771	30,921	1,505,853	48.7	1,248,352
Welland.....	44	440	10.0	933	2,301	92,960	40.4	85,244
Wellington.....	1,833	21,629	11.8	54,600	58,328	2,764,747	47.4	1,998,912
Wentworth.....	76	760	10.0	1,612	13,313	644,349	48.4	525,789
York.....	121	1,331	11.0	2,824	28,773	1,245,871	43.3	1,118,792
The Province:								
1920.....	21,053	224,893	10.7	515,983	581,689	25,712,447	44.2	20,556,442
1919.....	13,717	129,461	9.4	670,608	628,761	19,735,287	31.4	26,403,773
Annual Averages:								
1912-1920....	10,207				514,078	19,346,854	37.6	16,208,903
1907-1911....	10,652				471,545	15,772,739	33.4	8,674,687
1907-1920....	10,366				498,888	18,070,384	36.2	13,518,112

No estimates of yields of flax were made previous to 1918.

CORN.*

TABLE XII.—Showing by County Municipalities of Ontario, the area, produce, and market value of Corn for husking and for fodder for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Corn for Husking.				Corn for Silo.			
	Acres.	Bushels. (in the ear)	Per acre.	Market value. \$	Acres.	Tons green.	Per acre.	Market value. \$
Algoma.....	38	950	25.0	751	68	487	7.16	2,435
Brant.....	3,006	204,709	68.1	161,754	9,018	114,078	12.65	570,390
Bruce.....	392	15,680	40.0	13,062	8,987	78,097	8.69	390,485
Carleton.....	1,330	56,525	42.5	48,492	18,421	231,368	12.56	1,156,840
Dufferin.....	88	3,520	40.0	2,781	1,130	11,865	10.50	59,325
Dundas.....	2,110	94,950	45.0	82,315	11,794	117,350	9.95	586,750
Durham.....	1,258	94,350	75.0	85,203	10,613	97,109	9.15	485,545
Elgin.....	18,300	1,504,260	82.2	1,051,076	20,714	188,705	9.11	943,525
Essex.....	67,402	5,863,974	87.0	3,210,365	7,983	83,822	10.50	419,110
Frontenac.....	1,660	106,904	64.4	96,539	5,413	49,908	9.22	249,540
Glengarry.....	833	37,485	45.0	32,581	7,672	86,157	11.23	430,785
Grenville.....	1,622	97,320	60.0	80,854	7,243	75,762	10.46	378,810
Grey.....	595	23,800	40.0	19,343	13,063	114,432	8.76	572,160
Haldimand.....	2,253	178,438	79.2	135,558	3,890	36,761	9.45	183,805
Haliburton.....	143	5,720	40.0	4,520	191	1,433	7.50	7,165
Halton.....	313	23,475	75.0	19,874	4,946	56,879	11.50	284,395
Hastings.....	3,486	163,842	47.0	125,394	13,206	122,156	9.25	610,780
Huron.....	1,310	85,150	65.0	59,593	13,922	154,395	11.09	771,975
Kent.....	55,593	4,919,981	88.5	3,010,118	13,701	137,010	10.00	685,050
Lambton.....	16,635	1,362,407	81.9	950,422	20,310	191,117	9.41	955,585
Lanark.....	1,180	47,200	40.0	39,533	9,200	101,752	11.06	508,760
Leeds.....	3,872	228,448	59.0	206,299	10,573	130,577	12.35	652,885
Lennox & Add....	2,136	136,918	64.1	139,099	5,035	39,978	7.94	199,890
Lincoln.....	3,743	313,663	83.8	309,453	3,909	38,425	9.83	192,125
Manitoulin.....	60	1,500	25.0	1,016	529	5,290	10.00	26,450
Middlesex.....	9,358	797,302	85.2	614,701	28,825	312,751	10.85	1,563,755
Muskoka.....	161	4,830	30.0	4,198	329	2,639	8.02	13,195
Nipissing.....	22	550	25.0	435	13	91	7.00	455
Norfolk.....	15,384	1,115,340	72.5	828,427	10,501	96,189	9.16	480,945
Northumberland..	2,940	205,800	70.0	172,374	10,576	100,789	9.53	503,945
Ontario.....	764	42,020	55.0	34,341	15,261	170,923	11.20	854,615
Oxford.....	3,201	245,517	76.7	180,142	30,924	346,658	11.21	1,733,290
Parry Sound.....	123	3,075	25.0	2,499	155	1,528	9.86	7,640
Peel.....	333	19,980	60.0	15,788	6,838	72,825	10.65	364,125
Perth.....	488	23,424	48.0	19,646	12,808	128,080	10.00	640,400
Peterborough.....	685	17,125	25.0	13,918	7,848	91,586	11.67	457,930
Prescott.....	2,832	155,194	54.8	133,491	7,717	81,260	10.53	406,300
Prince Edward....	5,128	358,960	70.0	310,786	6,447	49,062	7.61	245,310
Rainy R. & Kenora	26	520	20.0	352	71	616	8.67	3,080
Renfrew.....	617	15,425	25.0	13,233	5,070	53,235	10.50	266,175
Russell.....	782	23,460	30.0	21,185	6,494	73,317	11.29	366,585
Simcoe.....	1,404	49,140	35.0	42,156	11,732	104,532	8.91	522,660
Stormont.....	1,366	66,934	49.0	55,760	7,356	80,916	11.00	404,580
Sudbury.....	20	500	25.0	395	44	308	7.00	1,540
Thunder Bay.....	10	250	25.0	169	.....	.....	.....	.....
Timiskaming.....	3	75	25.0	60	34	408	12.00	2,040
Victoria.....	263	7,890	30.0	6,413	8,864	81,017	9.14	405,085
Waterloo.....	407	29,141	71.6	23,685	10,735	136,335	12.70	681,675
Welland.....	6,187	477,636	77.2	368,786	5,734	49,771	8.68	248,855
Wellington.....	230	9,200	40.0	7,446	9,062	97,779	10.79	488,895
Wentworth.....	1,140	91,200	80.0	77,725	8,847	107,403	12.14	537,015
York.....	677	40,620	60.0	33,013	15,360	163,123	10.62	815,615
The Province:								
1920.....	243,909	19,372,277	79.4	12,867,119	449,176	4,668,054	10.39	23,340,270
1919.....	221,004	15,152,475	68.6	16,400,838	399,549	4,013,946	10.05	20,069,730
Annual Averages:								
1912-1920....	264,356	17,860,750	67.6	11,650,965	423,152	4,238,246	10.02	14,921,342
1902-1911....	325,515	22,988,755	70.6	8,780,681	236,330	2,731,936	11.56	5,652,083
1892-1901....	294,076	21,218,057	72.2	5,314,705	157,611	1,777,533	11.28	3,555,065
1892-1920....	295,694	20,793,616	70.3	8,476,295	267,165	2,870,307	10.74	7,805,640

* The combined average area for corn for the ten years 1882-1891 was 195,878 acres, the average value of the produce for the same period being \$3,704,614. The combined average for corn for the thirty-nine years 1882-1920 is 468,761 acres, the average value of the produce for the same period being \$13,056,981.

POTATOES AND TURNIPS.

TABLE XIII.—Showing by County Municipalities of Ontario, the area, produce, and market value of Potatoes and Turnips for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Potatoes.				Turnips.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	1,138	199,833	175.6	226,848	445	178,000	400	48,950
Brant.....	1,969	218,953	111.2	261,769	2,289	1,036,917	453	285,152
Bruce.....	4,012	615,842	153.5	509,634	2,705	1,347,090	498	370,450
Carleton.....	4,922	708,276	143.9	793,684	1,057	387,919	367	106,678
Dufferin.....	4,625	625,763	135.3	525,763	2,082	924,408	444	254,212
Dundas.....	1,675	259,625	155.0	242,907	157	56,834	362	15,629
Durham.....	3,195	525,897	164.6	482,817	3,303	1,552,410	470	426,913
Elgin.....	2,496	374,400	150.0	433,399	237	79,395	335	21,834
Essex.....	2,325	316,665	136.2	396,779	57	11,400	200	3,135
Frontenac.....	3,550	467,535	131.7	446,077	309	85,593	277	23,538
Glengarry.....	2,128	337,501	158.6	302,953	298	105,194	353	28,928
Grenville.....	2,640	318,648	120.7	292,234	185	64,565	349	17,755
Grey.....	6,127	823,469	134.4	747,193	4,050	1,944,000	480	534,600
Haldimand.....	1,084	155,879	143.8	184,540	54	23,868	442	6,564
Haliburton.....	627	94,301	150.4	84,373	200	66,600	333	18,315
Haltori.....	1,662	261,100	157.1	270,215	1,135	601,550	530	165,426
Hastings.....	5,398	874,476	162.0	761,124	1,172	398,480	340	109,582
Huron.....	4,023	648,910	161.3	586,276	3,800	2,010,200	529	552,805
Kent.....	2,957	420,781	142.3	501,836	122	30,500	250	8,388
Lambton.....	2,826	438,595	155.2	467,144	328	82,000	250	22,550
Lanark.....	2,630	360,836	137.2	316,522	609	246,645	405	67,827
Leeds.....	2,888	398,833	138.1	366,938	620	240,560	388	66,154
Lennox & Add....	2,870	451,451	157.3	389,417	209	41,800	200	11,495
Lincoln.....	1,355	221,814	163.7	270,156	79	44,240	560	12,166
Manitoulin.....	571	95,528	167.3	82,494	208	89,232	429	24,539
Middlesex.....	6,213	1,040,678	167.5	1,102,339	1,301	679,122	522	186,759
Muskoka.....	1,235	218,595	177.0	222,183	487	194,313	399	53,436
Nipissing.....	1,156	222,992	192.9	246,625	226	69,834	309	19,204
Norfolk.....	2,989	347,023	116.1	337,853	588	236,376	402	65,004
Northumberland..	3,872	624,554	161.3	572,175	3,310	1,655,000	500	455,125
Ontario.....	6,068	1,095,274	180.5	1,153,771	7,715	4,320,400	560	1,188,110
Oxford.....	2,777	382,671	137.8	434,776	4,052	2,548,708	629	700,895
Parry Sound.....	1,510	296,262	196.2	311,796	616	219,296	356	60,306
Peel.....	4,487	521,389	116.2	482,232	1,301	537,313	413	147,761
Perth.....	3,046	531,222	174.4	509,944	3,161	1,681,652	532	462,454
Peterborough.....	2,434	456,618	187.6	435,217	1,931	1,158,600	600	318,615
Prescott.....	2,856	492,660	172.5	406,257	451	162,811	361	44,773
Prince Edward....	1,724	225,844	131.0	209,982	110	25,740	234	7,079
Rainy R. & Kenora	745	133,355	179.0	151,254	175	67,900	388	18,672
Renfrew.....	4,420	778,804	176.2	702,874	572	189,332	331	52,066
Russell.....	1,628	306,227	188.1	298,135	338	127,764	378	35,135
Simcoe.....	11,415	1,788,731	156.7	1,623,045	4,877	2,516,532	516	692,046
Stormont.....	1,548	229,414	148.2	251,271	78	27,924	358	7,679
Sudbury.....	1,334	250,392	187.7	275,710	376	146,264	389	40,223
Thunder Bay.....	1,856	345,773	186.3	414,400	395	160,370	406	44,102
Timiskaming.....	757	150,037	198.2	179,522	266	87,514	329	24,066
Victoria.....	2,285	312,360	136.7	262,444	2,986	1,278,008	428	351,452
Waterloo.....	2,803	378,125	134.9	416,358	4,098	2,089,980	510	574,745
Welland.....	2,126	260,860	122.7	341,332	71	28,400	400	7,810
Wellington.....	4,924	767,159	155.8	690,871	8,670	4,863,870	561	1,337,564
Wentworth.....	4,062	538,621	132.6	651,815	1,753	951,879	543	261,767
York.....	7,546	1,051,158	139.3	1,149,257	4,974	2,467,104	496	678,454
The Province:								
1920.....	157,509	23,961,709	152.1	23,776,530	80,588	40,141,406	498	11,038,887
1919.....	157,286	15,144,921	96.3	25,026,467	85,312	28,740,526	337	7,903,645
Annual Averages:								
1912-1920....	158,564	18,281,984	115.3	16,503,000	91,997	39,946,289	434	6,588,469
1902-1911....	153,092	17,355,152	113.4	8,928,246	123,855	54,987,697	444	5,498,770
1892-1901....	164,451	18,304,638	111.3	6,150,629	147,080	63,424,431	431	6,342,443
1882-1891....	155,449	18,840,683	121.2	8,476,165	104,943	42,981,280	410	4,298,128
1882-1920....	157,872	18,193,400	115.2	9,848,138	117,609	50,601,299	430	5,658,708

MANGELS AND SUGAR BEETS.

TABLE XIV.—Showing by County Municipalities of Ontario the area, produce and market value of Mangels and Sugar Beets for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for various periods.

Counties and Districts.	Mangels.				Sugar Beets.			
	Acres.	Bushels.	Per acre.	Market value.	Acres.	Bushels.	Per acre.	Market value.
				\$				\$
Algoma.....	24	9,600	400	2,640	14	2,800	200	770
Brant.....	780	415,740	533	114,329	80	32,000	400	8,800
Bruce.....	2,848	1,241,728	436	341,475	71	15,975	225	4,393
Carleton.....	325	110,500	340	30,388	160	48,000	300	13,200
Dufferin.....	425	140,675	331	38,686	155	58,900	380	16,198
Dundas.....	92	34,040	370	9,361	60	18,000	300	4,950
Durham.....	1,021	508,458	498	139,826	54	21,600	400	5,940
Elgin.....	320	160,000	500	44,000	373	148,081	397	40,722
Essex.....	429	203,775	475	56,038	4,773	1,250,623	451	343,921
Frontenac.....	98	32,438	331	8,920	117	40,131	343	11,036
Glengarry.....	72	29,160	405	8,019	26	7,800	300	2,145
Grenville.....	60	26,700	445	7,343	70	28,000	400	7,700
Grey.....	2,090	938,410	449	258,063	293	100,499	343	27,637
Haldimand.....	165	74,910	454	20,600	22	7,700	350	2,118
Haliburton.....	13	5,200	400	1,430	9	2,700	300	743
Halton.....	937	473,185	505	130,126	75	37,500	500	10,313
Hastings.....	201	53,466	266	14,703	111	22,200	200	6,105
Huron.....	2,714	1,215,872	448	334,365	417	168,468	404	46,329
Kent.....	575	271,975	473	74,793	20,076	9,897,468	493	2,721,804
Lambton.....	563	228,015	405	62,704	6,436	2,748,172	427	755,747
Lanark.....	187	75,361	403	20,724	78	27,300	350	7,508
Leeds.....	156	47,736	306	13,127	95	26,410	278	7,263
Lennox & Add.....	93	20,925	225	5,754	83	17,845	215	4,907
Lincoln.....	184	94,392	513	25,958	165	72,270	438	19,874
Manitoulin.....	44	17,732	403	4,876	24	9,600	400	2,640
Middlesex.....	961	483,383	503	132,930	793	334,646	422	92,028
Muskoka.....	51	20,859	409	5,736	25	7,850	314	2,159
Nipissing.....	44	13,200	300	3,630	6	960	160	264
Norfolk.....	325	163,800	504	45,045	249	99,849	401	27,459
Northumberland..	397	148,081	373	40,722	95	41,800	440	11,495
Ontario.....	2,266	1,123,936	496	309,082	230	72,450	315	19,924
Oxford.....	1,646	1,028,750	625	282,906	404	207,656	514	57,105
Parry Sound.....	57	22,800	400	6,270	39	11,700	300	3,218
Peel.....	725	297,250	410	81,744	54	18,900	350	5,198
Perth.....	2,501	1,350,540	540	371,399	200	65,600	328	18,040
Peterborough.....	409	192,230	470	52,863	28	7,000	250	1,925
Prescott.....	93	39,990	430	10,997	51	15,300	300	4,208
Prince Edward....	78	22,854	293	6,285	58	17,400	300	4,785
Rainy R. & Kenora	71	26,270	370	7,224	29	7,598	262	2,089
Renfrew.....	250	75,000	300	20,625	101	28,280	280	7,777
Russell.....	149	60,494	406	16,636	44	18,700	425	5,143
Simcoe.....	2,448	1,025,712	419	282,071	452	127,916	283	35,177
Stormont.....	71	29,962	422	8,240	52	19,188	369	5,277
Sudbury.....	65	19,500	300	5,363	33	6,600	200	1,815
Thunder Bay.....	40	19,600	490	5,390	34	10,880	320	2,992
Timiskaming.....	31	10,850	350	2,984	15	4,500	300	1,233
Victoria.....	700	302,400	432	83,160	48	14,400	300	3,960
Waterloo.....	2,017	960,092	476	264,025	858	338,910	395	93,200
Welland.....	92	41,400	450	11,385	88	35,200	400	9,680
Wellington.....	2,614	1,351,438	517	371,646	100	35,700	357	9,818
Wentworth.....	1,066	606,554	569	166,802	131	58,950	450	16,211
York.....	2,867	1,307,352	456	359,522	234	79,092	338	21,750
The Province:								
1920.....	36,450	17,174,290	471	4,722,930	36,288	16,497,067	455	4,536,693
1919.....	35,011	13,409,270	383	3,687,549	24,500	9,586,495	391	2,636,286
Annual Average								
1912-1920....	46,694	19,831,051	425	2,918,687	23,307	8,734,011	375	1,723,556
1902-1911....	70,809	33,245,680	470	2,659,654	*21,132	8,484,719	402	1,027,108
1892-1901....	39,984	17,864,726	447	1,429,178				
1882-1891....	19,546	8,538,096	437	683,048				
1882-1920....	44,196	19,870,884	450	1,897,102	†22,530	8,644,978	384	1,474,825

*1907-1911 †1907-1920

ALFALFA AND HAY AND CLOVER.

TABLE XV.—Showing by County Municipalities of Ontario the area, produce and market value of Alfalfa, Hay and Clover for the year 1920, together with the comparative totals for the Province for 1919, and the annual average for various periods.

Counties and Districts.	Alfalfa.				Hay and Clover.			
	Acres.	Tons.	Per acre.	Market value.	Acres.	Tons.	Per acre.	Market value.
				\$				\$
Algoma.....	50	125	2.50	3,125	24,156	44,689	1.85	1,105,858
Brant.....	4,138	10,345	2.50	258,108	37,636	50,056	1.33	1,220,262
Bruce.....	11,504	24,734	2.15	514,467	135,724	192,728	1.42	3,901,532
Carleton.....	548	1,337	2.44	30,083	104,184	128,146	1.23	2,752,068
Dufferin.....	580	1,450	2.50	39,875	65,608	83,322	1.27	1,925,228
Dundas.....	328	918	2.80	21,573	55,442	80,391	1.45	1,614,630
Durham.....	718	1,580	2.20	43,450	57,990	63,209	1.09	1,728,728
Elgin.....	1,428	3,584	2.51	88,274	77,315	97,417	1.26	2,191,849
Essex.....	3,956	9,178	2.32	226,605	57,644	78,396	1.36	1,913,470
Frontenac.....	1,388	3,359	2.42	85,251	86,520	92,576	1.07	2,332,254
Glengarry.....	428	1,070	2.50	23,187	64,843	81,702	1.26	1,940,573
Grenville.....	656	1,804	2.75	43,891	55,962	83,943	1.50	1,877,009
Grey.....	14,183	32,621	2.30	700,047	169,687	223,987	1.32	4,638,952
Haldimand.....	16,712	39,775	2.38	973,692	66,784	90,158	1.35	2,157,546
Haliburton.....	65	130	2.00	3,900	14,925	13,731	.92	427,799
Halton.....	7,293	20,056	2.75	590,850	39,464	44,594	1.13	1,251,971
Hastings.....	7,203	15,703	2.18	403,253	114,182	119,891	1.05	3,287,287
Huron.....	8,519	18,997	2.23	453,268	142,138	156,352	1.10	3,615,756
Kent.....	3,744	10,146	2.71	246,041	68,368	98,450	1.44	2,221,940
Lambton.....	10,664	30,499	2.86	740,821	91,860	127,685	1.39	2,791,656
Lanark.....	1,019	2,690	2.64	62,758	81,518	95,376	1.17	2,451,133
Leeds.....	460	1,035	2.25	26,527	80,144	121,819	1.52	2,964,852
Lennox & Add....	1,941	4,154	2.14	95,542	78,325	83,025	1.06	1,959,620
Lincoln.....	9,812	23,549	2.40	738,732	44,486	47,600	1.07	1,421,986
Manitoulin.....	289	751	2.60	14,269	22,620	32,573	1.44	516,966
Middlesex.....	4,654	13,171	2.83	339,153	124,862	162,321	1.30	3,982,860
Muskoka.....	19	29	1.50	725	29,052	45,031	1.55	1,360,008
Nipissing.....	51	93	1.83	3,162	25,943	32,429	1.25	1,001,968
Norfolk.....	1,567	3,839	2.45	102,885	60,210	68,639	1.14	1,701,926
Northumberland..	3,384	7,614	2.25	179,462	71,822	84,032	1.17	2,122,016
Ontario.....	1,634	4,902	3.00	136,423	76,705	88,978	1.16	2,346,837
Oxford.....	2,370	6,873	2.90	186,052	90,203	124,480	1.38	3,019,720
Parry Sound.....	22	44	2.00	1,408	33,189	40,159	1.21	1,202,090
Peel.....	7,709	18,810	2.44	481,536	51,116	62,362	1.22	1,649,166
Perth.....	883	2,402	2.72	57,048	112,887	164,815	1.46	3,732,849
Peterborough.....	1,542	3,747	2.43	104,466	52,117	58,892	1.13	1,637,583
Prescott.....	267	734	2.75	17,616	70,332	86,508	1.23	2,031,512
Prince Edward....	4,436	12,421	2.80	295,868	46,027	64,438	1.40	1,492,738
Rainy R. & Kenora	79	163	2.06	4,075	24,901	33,367	1.34	815,077
Renfrew.....	541	985	1.82	24,625	102,206	97,096	.95	2,876,489
Russell.....	288	769	2.67	20,763	53,571	58,928	1.10	1,478,708
Simcoe.....	2,779	6,864	2.47	168,168	123,225	178,676	1.45	4,487,152
Stormont.....	290	899	3.10	21,576	49,703	69,584	1.40	1,566,307
Sudbury.....					27,655	30,144	1.09	905,604
Thunder Bay.....	30	75	2.50	2,250	17,475	22,368	1.28	647,985
Timiskaming.....	72	144	2.00	5,040	17,148	19,206	1.12	656,781
Victoria.....	729	1,823	2.50	45,575	61,439	71,269	1.16	1,786,970
Waterloo.....	2,626	6,670	2.54	193,430	54,192	70,992	1.31	1,946,527
Welland.....	5,006	12,865	2.57	382,348	56,690	63,493	1.12	1,717,565
Wellington.....	2,249	5,420	2.41	136,747	125,768	160,983	1.28	3,694,054
Wentworth.....	5,698	13,276	2.33	410,228	54,056	65,948	1.22	1,995,668
York.....	6,269	15,359	2.45	424,216	83,721	102,140	1.22	2,969,074
The Province:								
1920.....	162,820	399,581	2.45	10,172,434	3,533,740	4,459,094	1.26	109,036,159
1919.....	146,790	314,419	2.14	7,293,462	3,508,266	5,588,804	1.59	126,750,915
Annual Average:								
1912-1920....	167,437	401,002	2.39	6,244,605	3,324,651	4,793,293	1.44	74,649,154
1902-1911....				*	3,072,288	4,722,662	1.54	47,093,908
1892-1901....				*	2,520,783	3,650,840	1.45	29,085,813
1882-1891....				*	2,290,495	3,102,733	1.35	32,086,445
1882-1920....				*	2,827,294	4,141,308	1.46	46,428,346

* Including Alfalfa.

CARROTS—ALL FIELD CROPS.

TABLE XVI.—Showing by County Municipalities of Ontario, the area, produce and market value of Carrots, and all field crops enumerated in Tables VII. to XVI. for the year 1920, together with the comparative totals for the Province for 1919, and the annual averages for the various periods.

Counties and Districts.	Carrots.				All Field Crops.		
	Acres.	Bushels.	Per acre.	Value.	Acres.	Value.	Per acre.
				\$		\$	\$ c.
Algoma.....	53	13,250	250	3,644	44,338	2,000,424	45.12
Brant.....	53	15,900	300	4,372	135,756	5,241,864	38.61
Bruce.....	38	7,600	200	2,090	359,313	11,773,844	32.77
Carleton.....	154	38,500	250	10,588	254,657	8,638,566	33.92
Dufferin.....	5	750	150	206	196,505	6,033,182	30.70
Dundas.....	16	2,400	150	660	123,472	4,167,151	33.75
Durham.....	34	8,500	250	2,337	212,151	7,135,263	33.63
Elgin.....	48	12,480	260	3,432	237,863	8,626,529	36.27
Essex.....	85	12,750	150	3,506	289,686	11,199,241	38.66
Frontenac.....	82	22,550	275	6,201	157,275	4,756,959	30.25
Glengarry.....	45	10,395	231	2,859	133,204	4,307,587	32.34
Grenville.....	50	15,000	300	4,125	118,587	4,140,216	34.91
Grey.....	90	27,000	300	7,425	478,041	14,885,774	31.14
Haldimand.....	16	4,800	300	1,320	176,648	6,154,150	34.84
Haliburton.....	23	6,900	300	1,897	29,744	872,357	29.33
Halton.....	65	16,250	250	4,469	122,844	4,817,451	39.22
Hastings.....	78	15,600	200	4,290	288,019	9,428,445	32.74
Huron.....	36	8,100	225	2,228	426,664	13,635,505	31.96
Kent.....	41	8,200	200	2,255	357,675	16,907,867	47.27
Lambton.....	60	12,000	200	3,300	319,269	12,882,241	40.35
Lanark.....	38	9,500	250	2,613	173,268	5,760,525	33.25
Leeds.....	52	9,620	185	2,646	167,366	6,429,125	38.41
Lennox and Addington.....	54	10,800	200	2,970	158,767	4,705,299	29.64
Lincoln.....	50	17,250	345	4,744	112,158	4,672,134	41.66
Manitoulin.....	16	2,896	181	796	38,418	1,072,835	27.93
Middlesex.....	72	18,000	250	4,950	380,580	15,212,758	39.97
Muskoka.....	54	17,982	333	4,945	49,905	2,125,696	42.59
Nipissing.....	19	4,560	240	1,254	48,750	1,822,443	37.38
Norfolk.....	110	37,400	340	10,285	199,950	6,692,558	33.47
Northumberland.....	49	14,210	290	3,908	234,402	8,150,414	34.77
Ontario.....	63	19,530	310	5,371	283,227	11,763,968	41.54
Oxford.....	42	12,600	300	3,465	283,590	12,472,576	43.98
Parry Sound.....	39	9,750	250	2,681	63,251	2,352,295	37.19
Peel.....	68	18,700	275	5,142	180,987	6,459,466	35.69
Perth.....	19	4,940	260	1,359	318,102	12,210,049	38.38
Peterborough.....	42	10,500	250	2,888	160,293	5,995,436	37.40
Prescott.....	29	5,800	200	1,595	143,214	4,540,883	31.71
Prince Edward.....	41	7,175	175	1,973	128,719	4,564,593	35.46
Rainy River and Kenora.....	25	6,250	250	1,719	41,696	1,486,969	35.66
Renfrew.....	89	17,800	200	4,895	252,439	7,666,192	30.37
Russell.....	43	10,750	250	2,956	114,580	3,757,294	32.79
Simcoe.....	93	21,483	231	5,908	491,265	18,427,332	37.51
Stormont.....	20	5,440	272	1,496	104,551	3,467,906	33.17
Sudbury.....	69	10,350	150	2,846	48,375	1,763,208	36.45
Thunder Bay.....	61	17,385	285	4,781	28,655	1,393,807	48.64
Timiskaming.....	47	11,750	250	3,231	31,812	1,361,249	42.79
Victoria.....	17	2,975	175	818	198,332	6,157,559	31.05
Waterloo.....	22	5,500	250	1,512	204,368	8,656,792	42.36
Welland.....	33	9,900	300	2,723	133,163	5,037,416	37.83
Wellington.....	92	18,400	200	5,060	370,931	13,187,939	35.55
Wentworth.....	50	13,500	270	3,712	161,847	6,776,181	41.87
York.....	116	32,480	280	8,932	339,600	13,861,106	40.82
The Province:							
1920.....	2,706	674,101	249	185,378	10,108,272	367,608,619	36.37
1919.....	2,706	605,803	224	166,596	9,915,884	397,238,400	40.06
Annual Averages:							
1912-1920.....	2,606	650,056	249	119,037	*9,753,836	272,214,682	26.91
1902-1911.....	5,243	1,688,002	322	211,000	9,233,879	156,824,689	16.98
1892-1901.....	11,163	3,880,538	348	485,068	8,494,796	106,139,762	12.49
1882-1891.....	10,243	3,659,347	351	457,417	7,517,606	116,195,708	15.48
1882-1920.....	7,481	2,516,138	336	323,236	8,724,290	160,039,326	18.34

* Including flax in 1918, 1919 and 1920 only.

PASTURE, FALLOW, ORCHARD, SMALL FRUITS.

TABLE XVII.—Showing by County Municipalities the area in Cleared Pasture, Summer Fallow, Orchards and Small Fruits in 1920, together with totals for the Province for the past five years.

Counties and Districts.	Cleared Pastures.	Summer-fallow.	Orchard.	Small Fruits.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.
Algoma.....	8,684	1,037	314	78	10,113
Brant.....	28,803	3,267	4,528	467	37,065
Bruce.....	160,167	13,749	7,248	413	181,577
Carleton.....	96,565	3,394	1,786	196	101,941
Dufferin.....	59,358	6,162	2,744	99	68,363
Dundas.....	43,819	688	2,009	190	46,706
Durham.....	67,317	3,905	8,202	359	79,783
Elgin.....	90,887	6,208	8,157	1,072	106,324
Essex.....	45,574	3,406	6,273	1,445	56,698
Frontenac.....	81,585	845	1,690	194	84,314
Glengarry.....	51,901	192	1,135	91	53,319
Grenville.....	51,575	1,705	1,409	128	54,817
Grey.....	161,344	11,649	10,524	487	184,004
Haldimand.....	39,723	6,785	5,134	372	52,014
Haliburton.....	14,906	300	120	13	15,339
Halton.....	31,530	3,658	6,736	1,026	42,950
Hastings.....	122,620	2,584	6,468	393	132,065
Huron.....	190,652	8,229	11,684	529	211,094
Kent.....	90,497	4,831	5,852	1,064	102,244
Lambton.....	155,098	5,478	12,354	800	173,730
Lanark.....	123,870	1,698	1,296	113	126,977
Leeds.....	85,518	707	1,820	209	88,254
Lennox and Addington.....	73,791	1,859	2,565	257	78,472
Lincoln.....	21,656	3,839	15,402	3,112	44,009
Manitoulin.....	9,615	338	217	21	10,191
Middlesex.....	234,943	7,459	12,598	1,281	256,281
Muskoka.....	16,107	536	149	49	16,841
Nipissing.....	9,354	690	62	35	10,141
Norfolk.....	43,253	6,240	9,943	1,715	61,151
Northumberland.....	76,493	3,713	15,215	604	96,025
Ontario.....	72,367	3,033	6,081	522	82,003
Oxford.....	89,028	2,675	8,498	721	100,922
Parry Sound.....	19,272	767	134	49	20,222
Peel.....	58,604	7,419	5,360	672	72,055
Perth.....	108,850	7,444	6,027	389	122,710
Peterborough.....	77,465	3,988	2,208	238	83,899
Prescott.....	50,694	345	968	132	52,139
Prince Edward.....	43,539	1,692	8,830	635	54,696
Rainy River and Kenora.....	6,711	607	8	25	7,351
Renfrew.....	95,722	1,890	887	165	98,664
Russell.....	33,280	255	564	78	34,177
Simcoe.....	112,435	31,069	8,788	778	153,070
Stormont.....	45,025	267	1,415	82	46,789
Sudbury.....	10,123	437	21	32	10,613
Thunder Bay.....	4,076	150	23	30	4,279
Timiskaming.....	4,450	353	23	14	4,840
Victoria.....	65,223	3,312	2,101	139	70,775
Waterloo.....	32,462	3,571	4,473	419	40,925
Welland.....	27,671	5,895	6,750	1,264	41,580
Wellington.....	97,148	8,105	5,526	357	111,136
Wentworth.....	33,023	3,929	8,373	1,392	46,717
York.....	58,247	14,023	7,703	690	80,663
The Province:					
1920.....	3,432,620	216,377	248,395	25,635	3,923,027
1919.....	3,499,802	276,337	257,006	25,244	4,058,389
1918.....	3,561,754	248,463	265,678	24,596	4,100,491
1917.....	3,509,945	232,679	280,326	21,964	4,044,914
1916.....	3,409,581	331,736	280,653	22,817	4,044,787

MARKET PRICES.

TABLE XVIII.—The following table shows by counties the average prices of agricultural products for 1920, together with the average price for 1919, and the annual averages for various periods.

Counties and Districts.	Fall Wheat, per bush.	Spring Wheat, per bush.	Barley, per bush.	Oats, per bush.	Peas, per bush.	Beans, per bush.	Rye, per bush.	Buckwheat per bush.	Corn (in ear), per bush.	Hay, per ton.	Potatoes, per bush.
	cts.	cts.	cts.	cts.	cts.	\$ c.	cts.	cts.	cts.	\$ c.	cts.
Algoma.....	188.8	184.2	96.6	66.9	200.0	2 50	139.3	106.2	79.0	24 75	113.5
Brant.....	197.0	187.2	92.5	58.5	195.4	2 88	147.9	110.4	79.0	24 38	119.6
Bruce.....	183.6	174.1	88.6	54.6	184.1	3 06	126.4	100.5	83.3	20 24	82.8
Carleton.....	172.1	171.0	99.4	57.3	223.8	2 98	135.5	103.1	85.8	21 48	112.1
Dufferin.....	183.1	172.2	82.8	55.2	170.6	2 50	139.6	96.6	79.0	23 11	84.0
Dundas.....	185.9	185.1	110.2	66.9	175.0	3 20	148.5	105.8	86.7	20 08	93.6
Durham.....	194.6	188.2	96.3	59.0	211.0	2 92	145.0	102.3	90.3	27 35	91.8
Elgin.....	193.5	182.2	93.0	58.4	170.0	2 54	138.6	106.9	69.9	22 50	115.8
Essex.....	194.1	193.9	93.9	53.6	222.5	3 38	139.8	111.9	54.7	24 41	125.3
Frontenac.....	192.5	188.5	97.9	64.8	192.7	3 18	133.6	106.7	90.3	25 19	95.4
Glengarry.....	185.0	179.0	96.8	59.1	187.8	2 91	119.3	102.1	86.9	23 75	89.8
Grenville.....	188.7	188.4	100.1	67.0	225.0	3 05	129.8	106.3	83.1	22 36	91.7
Grey.....	183.1	177.9	89.2	54.4	177.0	3 15	118.5	109.0	81.3	20 71	90.7
Haldimand.....	188.5	178.8	89.8	55.0	161.7	2 94	131.2	108.4	76.0	23 93	118.4
Haliburton.....	185.5	188.3	94.6	63.9	191.2	3 00	133.1	111.0	79.0	31 16	89.5
Halton.....	190.1	183.0	94.7	58.3	184.0	3 33	147.5	118.6	84.7	28 07	103.5
Hastings.....	194.1	193.4	106.5	69.0	206.9	3 40	143.4	108.6	76.5	27 42	87.0
Huron.....	187.5	179.7	89.3	54.1	183.6	2 82	119.3	105.0	70.0	23 13	90.3
Kent.....	193.6	194.1	95.6	53.1	212.0	2 72	137.4	114.7	61.2	22 57	119.3
Lambton.....	195.2	191.4	90.7	52.1	200.0	3 23	131.2	125.0	69.8	21 86	106.5
Lanark.....	180.9	182.2	93.0	61.9	196.4	3 26	129.3	104.0	83.8	25 70	87.7
Leeds.....	192.7	188.1	108.2	70.3	197.3	3 30	136.8	115.7	90.3	24 34	92.0
Lennox & Add....	198.5	199.1	100.9	62.7	204.8	3 29	130.3	106.5	101.6	23 60	86.3
Lincoln.....	191.3	190.4	96.5	60.1	174.0	3 45	151.4	115.3	98.7	29 87	121.8
Manitoulin.....	190.8	181.5	94.4	60.9	195.0	2 50	137.2	100.0	67.7	15 87	86.4
Middlesex.....	199.5	195.8	85.5	53.8	206.7	2 83	131.4	118.5	77.1	24 54	105.9
Muskoka.....	186.0	184.2	96.1	67.6	218.0	3 25	145.5	118.1	86.9	30 20	101.6
Nipissing.....	.....	189.0	99.5	62.4	210.6	3 31	143.6	105.0	79.0	30 90	110.6
Norfolk.....	189.9	190.2	94.7	60.2	168.3	3 02	144.1	108.0	74.3	24 80	97.4
Northumberland..	197.0	193.7	99.8	62.9	216.1	3 13	150.6	110.6	83.8	25 25	91.6
Ontario.....	190.9	184.9	95.0	58.7	177.2	2 74	147.0	99.7	81.7	26 38	105.3
Oxford.....	201.3	196.6	95.9	62.3	190.0	3 21	135.7	109.2	73.4	24 26	113.6
Parry Sound.....	189.6	188.2	106.6	62.1	210.5	3 00	158.9	111.7	81.3	29 93	105.2
Peel.....	194.1	179.8	96.8	55.7	176.0	3 00	140.7	98.3	79.0	26 45	92.5
Perth.....	194.1	187.2	88.2	59.5	181.6	2 47	147.9	101.4	83.9	22 65	96.0
Peterborough.....	191.3	188.4	99.7	58.3	207.6	3 56	140.4	100.5	81.3	27 81	95.3
Prescott.....	181.6	181.2	91.2	58.6	220.6	3 16	95.4	106.1	86.0	23 48	82.5
Prince Edward...	197.3	195.0	96.9	61.5	236.4	3 23	136.9	101.6	86.6	23 17	93.0
Rainy R. & Kenora	188.5	185.5	97.4	67.8	250.0	2 50	128.6	100.0	67.7	24 43	113.4
Renfrew.....	175.7	177.1	98.7	54.0	176.8	3 20	129.8	102.3	85.8	29 63	90.3
Russell.....	185.5	189.3	103.2	61.6	230.0	3 19	143.1	113.3	90.3	25 09	97.4
Simcoe.....	192.8	185.4	90.2	54.6	172.5	3 16	142.0	102.1	85.8	25 11	90.7
Stormont.....	180.6	182.2	100.7	64.0	210.0	3 06	144.8	108.2	83.3	32 51	109.5
Sudbury.....	195.3	182.7	105.7	65.3	220.0	2 50	143.1	110.0	79.0	30 04	110.1
Thunder Bay.....	195.3	197.0	90.1	64.7	225.0	2 50	152.7	100.0	67.7	28 97	119.8
Timiskaming.....	197.2	194.2	103.8	72.0	212.0	2 50	143.1	100.0	79.0	34 20	119.7
Victoria.....	187.2	177.1	94.2	55.1	188.5	2 67	125.5	101.8	81.3	25 07	84.0
Waterloo.....	191.3	180.2	93.3	59.7	193.9	2 83	146.4	103.7	81.3	27 42	110.1
Welland.....	198.7	198.4	92.8	62.9	188.1	3 79	131.1	110.9	77.2	27 05	130.8
Wellington.....	185.5	178.1	91.8	55.4	179.0	2 50	136.0	101.9	80.9	22 95	90.1
Wentworth.....	189.8	186.3	96.0	60.1	185.0	3 13	136.7	112.0	85.2	30 26	121.0
York.....	199.2	194.2	98.8	59.4	190.7	2 95	147.4	106.4	81.3	29 07	109.3
The Province:											
1920.....	193.4	183.8	93.8	58.2	193.3	2 88	142.0	105.5	66.4	24 45	99.2
1919.....	237.2	240.9	145.8	97.7	263.9	4 00	159.1	140.7	108.2	22 68	165.2
Annual Averages:											
1912-1920.....	147.9	175.1	87.2	59.1	173.7	3 62	113.9	96.3	65.2	15 57	90.3
1902-1911.....	83.6	81.2	50.1	36.7	74.8	1 48	60.2	52.4	38.2	9 97	51.4
1892-1901.....	67.8	67.5	38.5	27.9	53.5	93	44.9	38.7	25.0	7 97	33.6
1882-1891.....	90.0	89.6	54.5	34.3	61.6	1 16	60.0	41.5	.....	10 34	45.0
1882-1920.....	94.2	96.5	57.6	40.9	67.2	1 82	70.2	63.0	*40.8	11 21	54.1

* Average for 29 years, 1892-1920.

HORSES AND

TABLE XIX.—Showing by County Municipalities the number and value of Horses and year ending June 15th, 1920, together with the

Counties and Districts.	Horses all ages.				Cattle.	
	Number on hand.	Value.	Horses sold.		Milch cows on hand.	
			Number.	Value.	Number.	Value.
		\$		\$		\$
Algoma.....	3,223	453,184	369	52,229	5,098	425,071
Brant.....	9,612	1,225,591	1,009	137,185	14,483	1,461,045
Bruce.....	24,404	3,157,466	3,202	453,896	31,895	2,936,254
Carleton.....	17,764	2,414,785	1,810	258,990	39,375	3,240,169
Dufferin.....	12,291	1,514,670	1,369	193,035	15,245	1,347,810
Dundas.....	9,015	1,118,378	876	112,997	28,561	2,324,865
Durham.....	14,180	1,787,893	1,410	197,662	18,114	1,610,335
Elgin.....	17,418	2,150,727	2,157	283,837	30,512	2,948,985
Essex.....	20,601	2,517,690	2,256	314,573	19,982	1,785,991
Frontenac.....	10,714	1,222,704	795	101,256	29,824	2,008,050
Glengarry.....	9,533	1,214,444	1,021	134,411	28,378	2,102,810
Grenville.....	7,441	913,196	688	86,837	20,490	1,565,641
Grey.....	30,329	3,931,504	3,380	475,886	42,295	3,782,019
Haldimand.....	11,525	1,432,011	1,324	195,150	15,936	1,512,964
Haliburton.....	1,905	244,904	197	24,248	3,423	240,842
Halton.....	18,592	1,086,338	874	116,979	13,351	1,311,335
Hastings.....	19,038	2,412,360	1,711	218,372	44,779	3,047,659
Huron.....	31,817	4,163,884	4,708	696,408	37,997	3,706,987
Kent.....	25,154	3,243,718	2,706	368,205	23,345	2,126,029
Lambton.....	23,792	3,072,022	3,228	473,409	30,958	3,028,931
Lanark.....	11,762	1,484,196	1,044	138,203	25,304	1,876,798
Leeds.....	11,620	1,357,085	919	115,070	36,767	2,736,200
Lennox and Addington...	11,098	1,299,026	896	114,952	23,749	1,736,052
Lincoln.....	8,416	1,055,463	747	102,953	9,757	965,943
Manitoulin.....	2,494	333,270	268	34,880	4,654	383,676
Middlesex.....	32,455	4,095,484	4,247	627,270	51,297	5,035,314
Muskoka.....	3,616	496,836	381	53,229	6,384	493,802
Nipissing.....	2,860	433,090	230	33,424	6,336	481,346
Norfolk.....	14,022	1,710,178	1,220	148,869	21,550	1,968,162
Northumberland.....	16,462	1,985,970	1,639	220,916	26,559	2,076,648
Ontario.....	19,959	2,570,050	2,248	316,632	25,478	2,341,173
Oxford.....	21,074	2,620,492	2,403	337,680	48,996	4,796,218
Parry Sound.....	4,343	640,228	424	58,721	7,786	611,435
Peel.....	12,697	1,629,472	1,597	225,120	18,539	1,793,648
Perth.....	23,348	3,030,226	2,942	433,737	34,701	3,320,539
Peterborough.....	11,352	1,419,161	1,118	140,296	20,389	1,569,953
Prescott.....	8,379	1,146,071	753	103,846	28,009	1,908,813
Prince Edward.....	9,180	1,091,251	662	88,092	15,895	1,254,433
Rainy R. & Kenora.....	2,868	474,773	292	48,156	4,162	334,209
Renfrew.....	15,098	2,101,341	1,491	217,074	28,416	1,924,616
Russell.....	7,982	1,039,160	827	114,397	21,114	1,502,683
Simcoe.....	33,247	4,217,675	3,543	492,605	41,263	3,459,077
Stormont.....	7,728	946,914	689	88,170	25,595	1,878,929
Sudbury.....	3,171	460,246	366	53,432	6,019	495,725
Thunder Bay.....	1,696	273,614	153	21,991	3,042	285,826
Timiskaming.....	2,086	339,482	227	34,936	2,783	241,230
Victoria.....	13,670	1,633,146	1,472	194,102	19,956	1,600,272
Waterloo.....	13,524	1,651,044	1,344	183,279	19,209	1,942,990
Welland.....	9,020	1,122,178	799	99,988	12,408	1,185,957
Wellington.....	23,890	3,054,732	2,662	376,338	30,326	2,896,740
Wentworth.....	12,082	1,452,296	1,126	147,230	17,030	1,624,662
York.....	25,093	3,164,975	2,729	385,873	32,496	3,193,057
The Province:						
1920.....	704,640	89,606,594	76,548	10,647,026	1,170,010	100,429,918
1919.....	719,569	92,823,683	78,354	10,811,664	1,141,016	101,218,161
1918.....	732,977	95,710,928	80,984	11,019,354	1,097,039	91,662,681
1917.....	765,873	99,439,558	83,194	11,442,831	1,069,338	80,774,341
1916.....	775,732	101,434,391	78,119	10,684,992	1,045,029	69,337,793

CATTLE.

Cattle on hand June 15, 1920, and the number and value of those sold or slaughtered in the totals for the Province for the past five years.

Cattle.						Counties and Districts
Other cattle on hand.		Total on hand.		Sold or slaughtered.		
Number	Value.	Number.	Value.	Number.	Value.	
	\$		\$		\$	
8,052	321,105	13,150	746,176	4,276	234,273	Algoma.
18,244	879,814	32,727	2,340,859	13,376	870,383	Brant.
78,410	4,101,495	110,305	7,037,749	34,761	2,753,491	Bruce.
46,083	1,782,462	85,458	5,022,631	32,083	1,592,616	Carleton.
33,000	1,545,930	48,245	2,893,740	14,460	1,056,581	Dufferin.
16,566	618,118	45,127	2,942,983	17,024	689,168	Dundas.
35,042	1,554,860	53,156	3,165,195	17,319	1,252,998	Durham.
39,052	1,922,512	69,564	4,871,497	28,757	1,934,336	Elgin.
24,664	1,132,287	44,646	2,918,278	18,035	1,076,967	Essex.
29,066	968,578	58,890	2,976,628	19,467	810,010	Frontenac.
20,102	783,270	48,480	2,886,080	17,410	650,136	Glengarry.
14,835	561,661	35,325	2,127,302	14,408	668,230	Grenville.
91,923	4,400,468	134,218	8,182,487	43,291	3,265,999	Grey.
22,956	1,068,092	38,892	2,581,056	15,496	1,017,981	Haldimand.
6,243	222,029	9,666	462,871	3,231	169,560	Haliburton.
21,186	1,027,494	34,537	2,338,829	13,684	947,102	Halton.
47,061	1,567,700	91,840	4,615,359	33,740	1,404,943	Hastings.
92,776	4,774,025	130,773	8,481,012	42,949	3,411,340	Huron.
49,984	2,501,409	73,329	4,627,438	23,967	1,764,006	Kent.
72,723	3,832,177	103,681	6,861,108	37,068	3,035,928	Lambton.
44,263	1,597,403	69,567	3,474,201	21,368	1,134,406	Lanark.
28,248	980,901	65,015	3,717,101	21,983	956,291	Leeds.
26,365	988,672	50,114	2,724,724	17,620	843,199	Lennox and Addington
10,112	483,575	19,869	1,449,518	8,798	569,779	Lincoln.
10,025	430,871	14,679	814,547	3,956	256,128	Manitoulin.
94,871	4,998,672	146,168	10,033,986	54,214	3,812,113	Middlesex.
10,841	399,143	17,225	892,945	5,235	273,041	Muskoka.
10,648	373,902	16,984	855,248	4,515	237,448	Nipissing.
20,439	897,682	41,989	2,865,844	17,289	970,642	Norfolk.
34,123	1,414,889	60,682	3,491,537	22,813	1,287,180	Northumberland.
50,746	2,456,817	76,224	4,797,990	25,092	1,872,048	Ontario.
42,529	2,016,561	91,525	6,812,779	36,358	2,052,716	Oxford.
14,942	580,742	22,728	1,192,177	7,137	418,667	Parry Sound.
27,514	1,335,111	46,053	3,128,759	17,959	1,231,550	Peel.
62,951	2,945,820	97,652	6,266,359	32,802	2,164,685	Perth.
33,635	1,249,491	54,024	2,819,444	17,181	884,540	Peterborough.
22,352	709,600	50,361	2,618,413	16,448	633,571	Prescott.
10,690	434,240	26,585	1,688,673	11,029	481,712	Prince Edward.
7,049	265,110	11,211	599,319	3,169	180,183	Rainy River & Kenora
54,600	2,006,866	83,016	3,931,482	25,982	1,390,216	Renfrew.
17,057	572,818	38,171	2,075,501	15,012	616,626	Russell.
81,315	3,529,783	122,578	6,988,860	36,776	2,620,939	Simcoe.
14,329	543,599	39,924	2,422,528	14,332	580,600	Stormont.
8,809	330,974	14,828	826,699	4,433	252,938	Sudbury.
3,130	120,810	6,172	406,636	2,507	127,444	Thunder Bay.
4,075	152,228	6,858	393,458	2,368	143,278	Timiskaming.
42,749	1,744,605	62,705	3,344,877	18,526	1,177,719	Victoria.
26,573	1,195,521	45,782	3,138,511	20,640	1,553,121	Waterloo.
13,610	636,353	26,018	1,822,310	11,840	705,536	Welland.
60,782	2,861,125	91,108	5,757,865	34,129	2,573,325	Wellington.
18,465	876,858	35,495	2,501,520	15,863	976,557	Wentworth.
36,012	1,771,344	68,508	4,964,401	26,594	1,771,257	York.
						The Province:
1,711,817	76,467,572	2,881,827	176,897,490	1,018,770	63,355,503	1920
1,786,175	82,823,433	2,927,191	184,041,594	1,040,213	65,655,072	1919.
1,770,683	80,596,580	2,867,722	172,259,261	932,691	57,529,269	1918.
1,758,271	69,535,487	2,827,609	150,309,828	903,184	52,893,615	1917.
1,689,738	58,986,733	2,734,767	128,324,526	878,540	46,987,563	1916.

SHEEP, SWINE

TABLE XX.—Showing by County Municipalities the number and value of Sheep, Swine slaughtered in the year ending June 15, 1920, together

Counties and Districts	Sheep and Lambs				Swine	
	Number on hand.	Value	Sold or Slaughtered		Number on Hand	Value
			Number	Value		
		\$		\$		\$
Algoma	13,158	173,422	5,027	57,911	4,283	97,610
Brant	9,731	151,414	4,736	55,506	20,188	410,018
Bruce	41,329	613,736	19,023	238,929	50,054	989,568
Carleton	29,169	420,909	13,456	166,316	28,676	608,505
Dufferin	31,379	511,791	12,916	173,074	29,193	554,667
Dundas	6,133	77,828	2,549	26,459	22,036	411,412
Durham	31,465	460,962	12,485	166,924	27,108	525,895
Elgin	25,326	395,086	11,763	148,920	48,599	996,280
Essex	28,181	362,971	12,634	155,019	86,036	1,913,441
Frontenac	20,858	256,553	8,920	97,674	24,071	478,772
Glengarry	9,733	123,122	4,004	42,162	17,884	353,924
Grenville	10,062	136,239	5,318	55,520	17,223	338,432
Grey	66,455	1,011,445	30,872	412,141	68,811	1,307,409
Haldimand	19,067	286,768	8,844	122,401	22,454	425,952
Haliburton	6,823	83,172	2,886	31,977	2,449	44,082
Halton	14,304	229,150	6,301	80,716	18,782	385,031
Hastings	41,416	509,417	16,941	181,438	50,801	1,001,796
Huron	30,046	470,821	13,704	185,004	68,635	1,407,704
Kent	30,990	422,394	13,342	159,170	92,476	1,728,376
Lambton	27,634	423,077	13,372	167,952	52,780	1,016,543
Lanark	44,338	638,911	19,499	233,013	22,460	460,430
Leeds	17,006	231,792	7,086	72,986	26,128	541,372
Lennox and Addington	16,528	226,434	6,371	71,355	22,752	439,796
Lincoln	8,031	128,335	3,891	50,700	13,809	299,379
Manitoulin	23,391	289,581	9,461	104,449	4,959	98,188
Middlesex	30,456	489,123	14,293	189,382	58,832	1,180,758
Muskoka	13,781	173,641	5,867	66,004	3,635	77,971
Nipissing	13,459	159,355	4,344	46,915	6,121	129,031
Norfolk	15,989	242,553	7,396	100,290	30,390	586,527
Northumberland	19,839	283,896	8,666	117,424	35,310	688,545
Ontario	36,180	552,469	15,846	208,533	47,076	934,459
Oxford	11,892	190,272	5,682	70,400	49,542	1,018,088
Parry Sound	22,434	287,155	8,948	96,459	5,851	125,445
Peel	17,390	278,936	7,907	105,005	27,309	565,842
Perth	13,261	210,187	7,052	96,471	62,950	1,206,752
Peterborough	18,399	261,450	6,944	81,800	20,679	399,518
Prescott	5,296	61,222	2,723	29,953	17,483	410,851
Prince Edward	14,242	211,779	5,536	68,646	15,953	309,329
Rainy River & Kenora	3,800	54,188	1,103	13,424	4,288	97,466
Renfrew	68,769	836,231	27,728	315,267	24,584	544,536
Russell	7,148	86,991	2,870	28,700	17,486	362,485
Simcoe	64,618	865,881	29,029	364,604	81,860	1,551,247
Stormont	5,712	70,657	2,338	25,414	18,062	363,769
Sudbury	7,848	105,242	2,585	33,088	5,083	127,075
Thunder Bay	603	8,744	184	2,300	3,616	78,069
Tiniskaming	2,501	34,764	661	7,833	2,872	62,753
Victoria	30,750	442,493	12,321	147,852	29,047	564,674
Waterloo	10,777	174,049	5,352	73,536	42,246	812,813
Welland	9,011	129,668	4,268	50,106	14,991	325,455
Wellington	40,100	702,151	18,972	268,833	63,857	1,204,982
Wentworth	11,630	175,962	6,114	86,024	24,644	504,709
York	30,646	467,352	13,564	179,045	57,942	1,186,073
The Province:						
1920	1,129,084	16,191,741	493,694	6,131,024	1,614,356	32,253,804
1919	1,101,740	18,128,240	458,952	6,126,881	1,695,487	33,263,051
1918	972,341	15,690,055	449,268	5,877,375	1,656,386	31,140,181
1917	956,986	9,946,030	463,576	4,240,803	1,664,639	21,464,366
1916	908,066	7,386,710	475,406	3,588,522	1,735,254	18,790,755

AND POULTRY.

and Poultry on hand on June 15, 1920, and the number and value of those sold or with the totals for the Province for the past five years.

Swine.		Poultry of all classes.				Counties and Districts
Sold or slaughtered.		Number. on hand.	Value.	Sold or slaughtered.		
Number.	Value.			Number.	Value.	
	\$		\$		\$	
5,503	164,320	49,723	54,088	29,840	38,091	Algoma.
28,083	873,100	122,720	136,999	71,575	89,164	Brant.
75,696	2,286,019	356,397	355,108	204,961	255,464	Bruce.
34,954	1,077,981	261,947	333,194	177,022	258,001	Carleton.
37,127	1,124,577	159,149	173,114	86,463	112,825	Dufferin.
28,177	811,216	173,841	194,352	90,097	123,191	Dundas.
38,706	1,156,922	243,286	255,461	115,638	133,452	Durham.
61,219	1,854,936	310,668	327,618	184,018	219,381	Elgin.
96,055	3,024,772	526,930	517,499	278,661	333,075	Essex.
27,394	820,724	141,759	164,502	94,123	133,038	Frontenac.
19,324	584,937	140,330	159,458	88,233	126,232	Glengarry.
24,748	706,308	138,243	158,128	77,991	111,896	Grenville.
93,282	2,947,711	426,795	438,917	239,082	293,412	Grey.
31,779	951,463	182,481	200,574	114,745	149,884	Haldimand.
3,336	90,072	23,325	23,372	13,542	15,208	Haliburton.
25,246	793,734	125,792	158,990	87,459	122,836	Halton.
62,198	1,904,503	286,001	265,586	143,465	171,085	Hastings.
98,608	3,072,625	538,053	554,665	281,629	337,986	Huron.
96,705	2,893,414	512,145	484,193	252,736	293,681	Kent.
68,274	2,053,682	457,405	517,218	251,978	348,465	Lambton.
26,733	734,623	159,464	169,152	85,476	112,312	Lanark.
30,571	874,942	171,500	191,759	96,268	130,782	Leeds.
30,903	936,361	154,435	167,794	91,419	117,650	Lennox and Addington
21,798	668,545	146,466	169,906	103,680	137,588	Lincoln.
6,497	183,280	31,610	35,162	17,532	23,843	Manitoulin.
85,398	2,672,103	565,846	623,202	310,169	424,339	Middlesex.
6,249	194,344	51,032	52,192	32,164	34,806	Muskoka.
6,811	201,946	37,243	37,292	24,573	28,574	Nipissing.
44,472	1,337,273	237,152	241,562	131,023	151,499	Norfolk.
50,361	1,482,628	267,423	262,571	137,720	153,474	Northumberland.
62,143	1,933,890	267,088	303,296	167,559	227,203	Ontario.
66,911	2,113,718	333,188	342,031	169,828	191,300	Oxford.
8,640	262,138	57,539	62,295	34,561	42,703	Parry Sound.
36,265	1,145,249	183,353	224,145	128,595	182,637	Peel.
83,734	2,639,296	378,942	396,650	190,425	234,711	Perth.
30,023	912,699	167,859	178,920	89,475	113,598	Peterborough.
17,530	520,641	136,248	154,289	88,369	116,581	Prescott.
22,754	667,602	115,938	114,032	64,809	81,735	Prince Edward.
4,896	146,684	39,856	44,165	21,343	29,532	Rainy River & Kenora
24,520	773,606	193,768	206,261	111,623	137,962	Renfrew.
18,060	508,389	101,606	106,955	67,400	83,979	Russell.
101,659	2,943,028	435,116	469,224	247,888	341,275	Simcoe.
23,792	727,559	141,543	147,252	75,688	100,378	Stormont.
6,891	210,934	45,030	47,212	31,138	33,421	Sudbury.
4,449	133,070	29,343	32,307	19,104	21,856	Thunder Bay.
4,092	126,238	27,839	28,574	17,175	19,334	Timiskaming.
40,897	1,206,870	186,591	202,427	105,449	132,285	Victoria.
52,953	1,632,011	197,993	200,527	96,610	110,886	Waterloo.
22,642	713,223	162,324	184,739	102,660	131,610	Welland.
90,593	2,860,927	308,461	333,765	177,981	236,188	Wellington.
34,366	1,056,411	164,619	186,273	111,259	141,379	Wentworth.
76,990	2,365,903	332,240	398,741	221,616	309,360	York.
						The Province:
2,101,007	64,079,147	11,005,645	11,787,708	6,253,837	8,001,147	1920.
2,154,317	59,879,582	11,705,809	11,351,364	6,434,693	7,254,051	1919.
2,130,060	46,997,183	12,281,105	9,307,051	6,516,460	5,318,857	1918.
2,137,999	41,609,181	13,606,292	8,517,195	6,806,531	4,554,451	1917.
2,105,621	33,671,966	14,377,844	7,933,157	6,774,884	4,226,038	1916.

LIVE STOCK AND

TABLE XXI. Showing by County Municipalities the total value of live stock and poultry numbers of the various classes on hand with

Counties and Districts	Total value of Live Stock sold or killed.	Horses on hand.				Cattle on other than	
		Stallions, 2 yrs. old and over.	Mares 2 yrs. old and over.	Geldings 2 yrs. old and over	Colts and Fillies under 2 years	Bulls for breeding	Calves under 1 year.
	\$						
Algoma.....	546,824	31	1,577	1,250	365	234	3,242
Brant.....	2,025,338	28	4,673	4,057	854	738	7,742
Bruce.....	5,987,799	114	12,231	8,112	3,947	1,345	25,668
Carleton.....	3,353,904	142	8,807	6,369	2,446	2,285	17,478
Dufferin.....	2,660,092	67	6,013	4,543	1,668	713	11,598
Dundas.....	1,763,031	55	4,466	3,670	824	1,788	6,714
Durham.....	2,907,958	47	7,212	5,242	1,679	863	12,823
Elgin.....	4,441,410	64	8,509	7,282	1,563	1,764	14,737
Essex.....	4,904,406	93	11,143	7,354	2,011	1,065	10,560
Frontenac.....	1,962,702	47	5,451	4,262	954	2,082	12,923
Glengarry.....	1,537,878	99	4,943	3,252	1,239	2,030	8,165
Grenville.....	1,628,791	57	3,756	2,942	686	1,441	5,772
Grey.....	7,395,149	134	15,343	10,941	3,911	1,867	31,786
Haldimand.....	2,436,879	49	5,673	4,482	1,321	698	10,249
Haliburton.....	331,065	13	933	701	258	195	2,609
Halton.....	2,061,367	30	4,276	3,318	968	618	7,970
Hastings.....	3,880,341	156	9,486	7,741	1,655	3,168	21,296
Huron.....	7,703,363	115	15,800	10,982	4,920	1,540	30,547
Kent.....	5,478,476	146	11,954	10,404	2,650	1,086	16,539
Lambton.....	6,079,436	101	12,182	8,214	3,295	1,272	24,576
Lanark.....	2,352,557	89	5,954	4,337	1,382	1,472	16,319
Leeds.....	2,150,071	53	5,733	4,804	1,030	2,436	11,742
Lennox & Addington	2,083,517	46	5,406	4,548	1,098	1,597	10,826
Lincoln.....	1,529,565	47	4,202	3,633	534	453	4,730
Manitoulin.....	602,580	27	1,274	886	307	190	3,820
Middlesex.....	7,725,207	147	16,168	11,778	4,362	2,546	30,697
Muskoka.....	621,424	24	1,706	1,516	370	290	4,461
Nipissing.....	548,307	62	1,540	941	317	475	4,837
Norfolk.....	2,708,573	52	6,952	5,782	1,236	1,214	9,306
Northumberland....	3,261,622	82	8,150	6,630	1,600	1,725	14,408
Ontario.....	4,558,306	101	10,112	7,225	2,521	1,335	17,788
Oxford.....	4,765,814	86	10,504	8,516	1,968	2,672	16,895
Parry Sound.....	878,688	51	2,152	1,608	532	422	5,878
Peel.....	2,889,561	53	6,480	4,394	1,770	1,017	10,600
Perth.....	5,568,900	92	11,498	8,220	3,538	1,718	24,116
Peterborough.....	2,132,933	75	5,734	4,323	1,220	1,193	13,461
Prescott.....	1,404,592	86	4,294	3,093	906	2,223	9,718
Prince Edward.....	1,387,787	25	4,415	3,996	744	986	5,025
Rainy R. & Kenora	417,979	35	1,258	1,166	409	205	2,974
Renfrew.....	2,834,125	203	7,665	5,286	1,944	2,212	21,875
Russell.....	1,352,091	93	3,876	2,973	1,040	1,456	7,300
Simcoe.....	6,762,451	161	16,670	12,201	4,215	2,138	30,267
Stormont.....	1,522,121	31	3,938	3,057	702	1,743	5,757
Sudbury.....	583,813	34	1,585	1,132	420	485	4,457
Thunder Bay.....	306,661	45	684	860	107	170	1,600
Timiskaming.....	331,619	29	992	858	207	154	2,088
Victoria.....	2,858,828	54	7,010	4,812	1,794	833	14,970
Waterloo.....	3,552,833	95	6,661	5,168	1,600	980	13,313
Welland.....	1,700,463	41	4,499	3,830	650	626	6,207
Wellington.....	6,315,611	89	11,852	9,056	2,893	1,456	24,317
Wentworth.....	2,407,601	42	5,819	5,176	1,045	786	7,920
York.....	5,011,438	164	12,306	9,554	3,069	1,757	14,650
The Province:							
1920	152,213,847	3,902	351,517	266,477	82,744	65,757	655,316
1919	149,727,250	4,087	354,677	269,390	91,415	63,189	688,850
1918	126,742,038	4,201	360,119	273,820	94,837	60,563	691,441
1917	114,740,881	.....	.....	.....	.....	.....	.....
1916	99,159,081	.....	.....	.....	.....	.....	.....

POULTRY ON HAND.

on hand in 1920, together with totals for the Province for the past five years, also the comparative totals for poultry for five years.

hand Milch cows.		Poultry on hand.				Counties & Districts.
Steers 2 yrs. old and over.	All other cattle.	Turkeys.	Geese.	Ducks.	Other fowls.	
1,015	3,561	1,712	1,434	726	45,851	Algoma.
1,712	8,052	602	3,283	2,525	116,310	Brant.
16,466	34,931	9,028	15,675	13,667	318,027	Bruce.
6,526	19,794	8,811	12,708	6,145	234,283	Carleton.
6,348	14,341	1,793	11,760	4,013	141,583	Dufferin.
346	7,718	6,635	6,240	3,128	157,838	Dundas.
5,694	15,662	2,273	10,407	6,756	223,850	Durham.
5,475	17,076	9,752	8,353	7,517	285,046	Elgin.
3,043	9,996	9,839	19,364	16,173	481,554	Essex.
1,838	12,223	11,162	4,049	3,452	123,096	Frontenac.
426	9,481	8,533	2,454	1,827	127,516	Glengarry.
212	7,410	5,644	4,860	2,538	125,201	Grenville.
16,250	42,020	8,432	19,933	15,643	382,787	Grey.
2,793	9,216	5,128	5,513	5,607	166,233	Haldimand.
813	2,626	977	400	267	21,681	Haliburton.
3,384	9,214	4,092	6,630	3,520	111,550	Halton.
3,290	19,307	8,195	7,522	4,119	266,165	Hastings.
18,632	42,057	7,954	19,484	21,845	488,770	Huron.
11,535	20,824	8,412	16,460	15,828	471,445	Kent.
15,200	31,675	21,044	16,522	13,928	405,911	Lambton.
7,122	19,350	5,562	3,810	1,902	148,190	Lanark.
999	13,071	7,896	3,546	3,347	156,711	Leeds.
2,605	11,337	6,557	2,951	3,633	141,294	Lennox & Addington.
725	4,204	2,128	2,485	3,758	138,095	Lincoln
1,807	4,208	2,343	1,532	793	26,942	Manitoulin
18,071	43,557	20,204	16,413	20,387	508,842	Middlesex
1,361	4,729	719	641	715	48,957	Muskoka
1,098	4,238	466	650	984	35,143	Nipissing
1,060	8,859	5,307	4,967	6,054	220,824	Norfolk
3,330	14,660	6,663	5,952	6,251	248,557	Northumberland
8,380	23,243	2,290	13,494	9,610	241,694	Ontario
4,742	18,220	1,679	8,364	8,287	314,858	Oxford
1,810	6,832	2,112	1,650	1,120	52,657	Parry Sound
4,540	11,357	3,506	9,909	6,178	163,760	Peel
9,009	28,108	2,150	15,466	14,520	346,806	Perth
4,499	14,482	6,803	6,062	3,116	151,878	Peterborough
441	9,970	6,732	3,917	2,958	122,641	Prescott
326	4,353	2,963	1,969	3,000	108,006	Prince Edward
1,058	2,812	1,758	1,076	442	36,580	Rainy R. & Kenora
9,054	21,459	5,880	8,206	3,270	176,412	Renfrew
549	7,752	1,757	2,948	2,875	94,026	Russell
13,620	35,290	10,731	24,172	13,147	387,066	Simcoe
313	6,516	5,263	3,282	2,113	130,885	Stormont
760	3,107	1,197	1,116	457	42,260	Sudbury
190	1,170	322	430	740	27,851	Thunder Bay
286	1,547	369	373	663	26,434	Timiskaming
7,746	19,200	3,851	10,538	4,957	167,245	Victoria
2,111	10,169	475	5,552	4,121	187,845	Waterloo
1,231	5,546	2,398	2,969	4,432	152,525	Welland
9,603	25,406	1,548	16,832	9,958	280,123	Wellington
1,973	7,786	1,199	5,374	4,672	153,374	Wentworth
4,289	15,316	5,037	15,541	13,968	297,694	York
245,706	745,038	267,883	395,238	311,652	10,030,872	The Province:
260,204	773,932	327,802	426,663	377,838	10,573,506	1920
257,272	761,407	376,609	412,214	392,001	11,100,281	1919
.....	.....	439,215	389,659	480,263	12,297,155	1918
.....	.....	557,929	408,046	586,705	12,825,164	1917
.....	.....	.....	.....	.....	.....	1916

LIVE STOCK AND POULTRY

TABLE XXII.—Showing by County Municipalities the numbers of the various comparative totals for the

Counties and Districts.	Horses sold.				Cattle sold		
	Stallions 2 yrs. old and over.	Mares 2 yrs. old and over.	Geldings 2 yrs. old and over.	Colts and Fillies un- der 2 yrs.	Bulls for breeding.	Milch Cows.	Calves under 1 year.
Algoma.....		177	155	37	78	769	967
Brant.....	18	466	427	98	411	2,366	3,975
Bruce.....	20	1,671	1,191	320	644	4,287	2,405
Carleton.....	30	865	780	135	1,073	5,853	11,179
Dufferin.....	22	675	580	92	318	1,951	1,110
Dundas.....	24	481	297	74	729	4,105	10,468
Durham.....	18	707	595	90	516	2,355	2,679
Elgin.....	24	1,011	980	142	896	5,980	8,014
Essex.....	28	1,228	873	127	506	3,626	5,986
Frontenac.....	7	437	286	65	904	4,075	8,172
Glengarry.....	3	511	441	66	693	3,761	10,689
Grenville.....	4	325	284	75	747	3,934	7,507
Grey.....	33	1,710	1,318	319	853	5,372	3,354
Haldimand.....	10	669	513	132	410	2,453	3,537
Haliburton.....	4	82	77	34	84	440	512
Halton.....	4	466	329	75	294	2,500	2,757
Hastings.....	22	856	661	172	1,395	6,836	14,512
Huron.....	25	2,179	2,094	410	806	5,139	3,382
Kent.....	37	1,421	1,105	143	414	3,567	3,698
Lambton.....	36	1,600	1,315	277	549	4,641	3,821
Lanark.....	11	506	417	110	512	3,001	4,156
Leeds.....	16	490	338	75	1,009	5,577	10,838
Lennox & Addington	6	485	349	56	682	3,144	6,658
Lincoln.....	14	398	293	42	358	1,815	3,012
Manitoulin.....	5	126	110	27	72	464	252
Middlesex.....	37	2,044	1,844	322	1,211	7,951	11,478
Muskoka.....	14	146	170	51	115	902	1,119
Nipissing.....	6	128	70	26	204	847	713
Norfolk.....	17	612	485	106	686	4,334	7,652
Northumberland....	16	837	662	124	938	4,484	7,602
Ontario.....	6	1,138	930	174	753	3,891	3,642
Oxford.....	17	1,159	1,024	203	1,189	8,274	14,834
Parry Sound.....	2	202	175	45	147	1,160	1,036
Peel.....	12	794	663	128	461	3,926	4,545
Perth.....	15	1,428	1,261	238	803	4,947	6,417
Peterborough.....	2	599	442	75	550	2,889	4,060
Prescott.....	6	363	329	55	896	3,299	8,302
Prince Edward.....	6	334	266	56	516	2,243	6,134
Rainy R. & Kenora	7	133	114	38	82	789	423
Renfrew.....	21	728	528	214	782	3,482	3,405
Russell.....	7	391	361	68	682	3,572	7,314
Simcoe.....	38	1,804	1,405	296	937	5,765	4,169
Stormont.....	2	356	263	68	593	3,419	9,170
Sudbury.....	2	169	168	27	206	1,209	933
Thunder Bay.....	2	67	68	16	69	610	1,002
Timiskaming.....	7	97	92	31	81	602	491
Victoria.....	2	758	581	131	427	2,304	1,825
Waterloo.....	6	637	587	114	456	3,172	3,665
Welland.....	3	409	325	62	320	1,986	4,325
Wellington.....	28	1,314	1,129	191	723	4,209	3,413
Wentworth.....	9	550	464	103	446	2,743	5,621
York.....	16	1,346	1,215	152	951	5,763	9,423
The Province:							
1920.....	727	38,085	31,429	6,307	30,177	176,783	266,353
1919.....	645	39,814	31,544	6,351	29,983	183,250	260,399
1918.....	347	41,352	32,566	6,719	28,429	166,963	222,578

SOLD OR SLAUGHTERED.

classes of Live Stock and Poultry sold or slaughtered in the year ending June 15, 1920, with Province for 1918 and 1919.

or slaughtered.		Poultry sold or killed.				Counties and Districts.
Steers 2 yrs. old and over.	All other cattle.	Turkeys.	Geese.	Ducks.	Other Fowl.	
1,127	1,335	1,805	1,251	660	26,124	Algoma
3,061	3,563	774	4,661	3,867	62,273	Brant
15,802	11,623	12,990	17,046	21,775	153,150	Bruce
7,419	6,559	9,617	15,402	11,819	140,184	Carleton
6,371	4,710	2,276	13,341	9,776	61,070	Dufferin
113	1,609	8,507	6,865	3,954	70,771	Dundas
6,186	5,583	2,832	10,248	10,220	92,338	Durham
6,612	7,255	10,640	9,350	11,893	152,135	Elgin
3,697	4,220	9,612	17,817	21,057	230,175	Essex
1,835	4,481	11,836	4,225	5,592	72,470	Frontenac
250	2,017	14,324	2,762	2,380	68,767	Glengarry
134	2,086	8,182	4,920	3,364	61,525	Grenville
19,229	14,483	12,501	22,594	26,759	177,228	Grey
4,420	4,676	6,048	5,462	8,952	94,283	Haldimand
997	1,198	998	394	338	11,812	Haliburton
4,058	4,075	3,078	7,386	5,552	71,443	Halton
3,096	7,901	11,180	7,356	6,480	118,449	Hastings
19,186	14,436	10,380	20,716	34,210	216,323	Huron
9,414	6,874	9,609	16,525	20,846	205,756	Kent
14,903	13,154	25,791	17,103	19,860	189,224	Lambton
7,374	6,325	6,805	4,419	2,501	71,751	Lanark
1,038	3,521	8,325	3,739	4,977	79,227	Leeds
2,749	4,387	7,114	3,273	5,552	75,480	Lennox & Addington
1,423	2,190	3,835	3,427	5,777	90,641	Lincoln
2,048	1,120	2,285	1,515	1,286	12,446	Manitoulin
16,098	17,476	23,846	18,537	29,460	238,326	Middlesex
1,273	1,826	914	649	945	29,656	Muskoka
1,420	1,331	386	1,429	1,102	21,656	Nipissing
1,465	3,152	5,328	5,143	7,546	113,006	Norfolk
3,597	6,192	7,701	6,186	8,742	115,091	Northumberland
9,108	7,698	3,580	15,087	14,626	134,266	Ontario
5,600	6,461	2,107	9,195	13,593	144,933	Oxford
2,570	2,224	2,245	1,478	1,138	29,700	Parry Sound
4,627	4,400	4,110	13,361	12,016	99,108	Peel
10,759	9,876	3,130	17,855	22,562	146,878	Perth
4,668	5,014	8,042	6,680	3,795	70,958	Peterborough
604	3,347	11,029	3,411	2,139	71,790	Prescott
348	1,788	6,194	2,193	3,919	52,503	Prince Edward
1,002	873	2,331	775	520	17,717	Rainy R. & Kenora
10,408	7,905	6,395	9,375	3,342	92,511	Renfrew
762	2,682	1,700	4,064	3,338	58,298	Russell
14,192	11,713	15,104	23,342	17,579	191,863	Simcoe
137	1,013	7,369	3,328	2,478	62,513	Stormont
982	1,103	1,395	730	247	28,766	Sudbury
135	691	205	518	1,221	17,160	Thunder Bay
398	796	574	448	1,178	14,975	Timiskaming
7,473	6,497	4,979	11,563	7,945	80,962	Victoria
7,768	5,579	470	5,840	5,453	84,847	Waterloo
1,946	3,263	2,185	2,997	6,402	91,076	Welland
13,702	12,082	2,727	18,260	15,341	141,653	Wellington
3,122	3,931	1,129	5,489	6,879	97,762	Wentworth
5,534	4,923	4,732	18,141	24,663	174,080	York
272,240	273,217	331,251	427,871	467,616	5,027,099	The Province: 1920
287,452	279,129	351,123	431,807	483,792	5,167,971	1919
273,675	241,046	344,773	459,913	514,125	5,197,649	1918

FARM PROPERTY, IMPLEMENTS AND LIVE STOCK.

TABLE XXIII.—Showing by County Municipalities of Ontario the value of farm lands, buildings, implements and live stock for the year 1920, together with the totals for the Province for the past five years.

Counties and Districts.	Land.	Buildings.	Implements.	Live Stock on hand.	Total.
	\$	\$	\$	\$	\$
Algoma.....	4,564,997	1,809,019	686,142	1,524,480	8,584,638
Brant.....	11,611,468	6,830,664	2,385,885	4,264,881	25,092,898
Bruce.....	29,201,622	15,647,212	4,812,082	12,153,627	61,814,543
Carleton.....	25,499,057	11,393,054	4,091,299	8,800,024	49,783,434
Dufferin.....	12,156,484	7,583,980	2,246,761	5,647,982	27,635,207
Dundas.....	11,210,066	6,344,131	2,368,001	4,744,953	24,667,151
Durham.....	14,524,906	9,109,468	2,675,321	6,195,406	32,505,101
Elgin.....	23,342,372	12,993,528	4,264,634	8,741,208	49,341,742
Essex.....	40,301,022	16,469,224	4,827,679	8,229,879	69,827,804
Frontenac.....	10,533,953	5,592,025	2,069,979	5,099,159	23,295,116
Glengarry.....	12,441,693	6,459,379	2,255,528	4,737,028	25,893,628
Grenville.....	7,277,737	4,577,552	1,736,342	3,673,297	17,264,928
Grey.....	30,615,929	19,942,106	6,061,535	14,871,762	71,491,332
Haldimand.....	12,091,774	7,700,316	2,568,035	4,926,361	27,286,486
Haliburton.....	1,719,009	724,746	302,283	858,401	3,604,439
Halton.....	13,463,500	6,829,755	2,160,357	4,198,338	26,651,950
Hastings.....	19,491,893	11,233,453	4,207,984	8,804,518	43,737,848
Huron.....	32,957,320	19,708,869	6,234,259	15,078,086	73,978,534
Kent.....	43,916,636	17,814,316	6,496,910	10,506,119	78,733,981
Lambton.....	32,485,525	15,648,642	5,513,203	11,889,968	65,537,338
Lanark.....	11,628,748	5,982,410	2,071,385	6,226,890	25,909,433
Leeds.....	12,506,523	7,623,618	2,664,132	6,039,109	28,833,382
Lennox and Addington.....	10,628,475	6,027,351	2,292,959	4,857,774	23,806,559
Lincoln.....	17,716,205	7,787,646	2,300,647	3,102,601	30,907,099
Manitoulin.....	2,701,100	1,249,902	551,486	1,570,748	6,073,236
Middlesex.....	42,488,550	22,812,978	7,098,028	16,422,553	88,822,109
Muskoka.....	3,602,720	1,937,522	749,606	1,693,585	7,983,433
Nipissing.....	3,356,162	1,503,738	707,440	1,614,016	7,181,356
Norfolk.....	15,284,913	8,626,002	3,143,690	5,646,664	32,701,269
Northumberland.....	14,477,200	9,455,064	3,123,204	6,712,519	33,767,987
Ontario.....	20,837,029	12,357,308	3,886,105	9,158,264	46,238,706
Oxford.....	25,530,351	16,366,303	5,264,078	10,983,662	58,144,394
Parry Sound.....	4,031,224	2,025,411	855,430	2,307,300	9,219,365
Peel.....	16,162,052	9,955,849	2,636,697	5,827,154	34,581,752
Perth.....	25,172,890	17,064,828	5,254,599	11,110,174	58,602,491
Peterborough.....	12,249,870	6,610,647	2,352,754	5,078,493	26,291,764
Prescott.....	14,183,146	7,766,564	2,621,643	4,390,846	28,962,199
Prince Edward.....	8,807,190	5,500,206	2,025,009	3,415,064	19,747,469
Rainy River and Kenora.....	3,797,244	1,154,938	587,170	1,269,911	6,809,263
Renfrew.....	17,719,554	8,277,592	3,153,072	7,619,851	36,770,069
Russell.....	11,746,812	5,556,190	1,906,479	3,671,092	22,880,573
Simcoe.....	33,705,588	20,714,518	6,310,410	14,092,887	74,823,403
Stormont.....	9,281,822	5,521,803	2,045,872	3,951,120	20,800,617
Sudbury.....	4,157,231	1,537,107	813,438	1,566,474	8,074,250
Thunder Bay.....	5,117,754	1,456,306	547,006	799,370	7,920,436
Timiskaming.....	5,116,328	1,092,928	598,900	859,031	7,667,187
Victoria.....	15,353,596	7,472,280	2,731,156	6,187,617	31,744,649
Waterloo.....	15,910,253	9,773,139	2,805,875	5,976,944	34,466,211
Welland.....	12,578,075	7,132,056	2,231,541	3,584,350	25,526,022
Wellington.....	24,399,479	16,646,959	4,770,093	11,053,495	56,870,026
Wentworth.....	18,637,454	8,828,743	2,752,660	4,820,760	35,039,617
York.....	32,823,733	16,781,522	4,963,595	10,181,542	64,750,392
The Province:					
1920.....	861,116,234	467,010,867	153,780,378	326,737,337	1,808,644,816
1919.....	848,767,153	426,649,086	137,310,618	339,607,932	1,752,334,789
1918.....	819,164,298	380,244,880	109,896,874	324,107,476	1,633,413,528
1917.....	807,426,986	370,384,055	104,581,053	289,676,977	1,572,069,071
1916.....	794,676,866	357,313,850	98,020,295	263,869,539	1,513,880,550

PART II.—CHATTEL MORTGAGES.

Table showing by County Municipalities of Ontario the total number and amount of Chattel Mortgages on record and undischarged on December 31st, 1920, against (1) all occupations; (2) farmers; together with totals for the Province for the past five years.

Counties and Districts.	Chattel mortgages against all occupations.				Chattel mortgages against farmers.			
	To secure existing debt.		For future indorsation.		To secure existing debt.		For future indorsation.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
		\$		\$		\$		\$
Algoma.....	158	210,815	...	...	70	64,192	...	...
Brant.....	130	582,955	...	...	46	59,787	...	...
Bruce.....	129	104,599	...	...	63	48,720	...	...
Carleton.....	271	339,566	...	...	25	41,389	...	...
Dufferin.....	33	22,495	...	...	18	13,824	...	...
Elgin.....	177	306,145	...	...	81	69,872	...	...
Essex.....	137	149,563	...	...	59	49,881	2	172
Frontenac.....	207	296,654	...	...	104	103,186	...	...
Grey.....	214	256,815	...	...	131	95,218	...	...
Haldimand.....	73	53,278	...	...	37	19,576	...	...
Haliburton.....	24	20,738	...	...	15	6,253	...	...
Halton.....	40	235,787	...	...	16	60,634	...	...
Hastings.....	324	240,253	...	...	159	86,581	...	...
Huron.....	97	132,239	1	126,000	50	58,959	...	...
Kenora.....	38	58,746	...	...	14	7,770	...	...
Kent.....	168	205,432	6	9,305	72	82,690	1	4,167
Lambton.....	92	72,565	...	...	27	29,386	...	...
Lanark.....	103	132,751	...	...	51	67,467	...	...
Leeds and Grenville.....	166	154,260	...	...	107	107,140	...	...
Lennox and Addington.....	84	65,397	...	...	51	31,994	1	675
Lincoln.....	75	142,640	1	1,000	22	40,494	...	...
Manitoulin.....	67	28,663	...	...	58	20,807	1	200
Middlesex.....	170	770,191	...	...	34	36,030	...	...
Muskoka.....	96	148,836	1	1,500	56	35,715	...	...
Nipissing.....	188	222,764	...	...	101	62,942	...	...
Norfolk.....	96	78,936	...	...	57	27,372	...	...
Northumberland and Durham.....	180	120,943	...	...	89	51,659	...	...
Ontario.....	97	95,481	...	...	54	41,893	...	...
Oxford.....	93	132,115	...	...	52	77,807	...	...
Parry Sound.....	114	106,026	1	2,500	57	37,546	...	...
Peel.....	42	49,704	...	...	15	18,361	...	...
Perth.....	86	76,269	2	135,500	23	22,114	1	500
Peterborough.....	121	113,046	2	3,018	44	19,080	1	2,343
Prescott and Russell.....	113	155,019	...	...	78	103,387	...	...
Prince Edward.....	91	119,540	...	...	71	84,231	...	...
Rainy River.....	104	74,166	...	...	52	21,446	...	...
Renfrew.....	133	179,525	5	309,393	78	94,985	1	8,500
Simcoe.....	245	967,793	...	...	144	102,548	...	...
Stormont, Dun. and Glen.....	205	222,971	10	8,578	137	150,923	8	4,412
Sudbury.....	328	408,096	...	...	198	111,006	...	...
Thunder Bay.....	144	371,545	4	8,615	47	29,006	1	1,833
Timiskaming.....	392	641,470	...	...	177	124,779	...	...
Victoria.....	41	40,418	3	2,115	19	16,295	...	...
Waterloo.....	99	169,415	...	...	20	21,513	...	...
Welland.....	142	447,142	...	...	17	9,905	...	...
Wellington.....	108	231,713	...	...	28	109,744	...	...
Wentworth.....	347	535,196	...	...	43	52,415	...	...
York.....	2,193	2,684,355	...	...	75	69,861	...	...
The Province:								
1920.....	8,775	12,975,031	36	607,524	3,042	2,698,383	17	22,802
1919.....	8,350	15,402,519	40	1,357,875	3,457	2,439,536	12	10,926
1918.....	8,172	23,241,853	44	2,887,706	3,773	2,310,396	17	9,929
1917.....	9,252	24,978,609	43	296,116	4,265	2,321,701	17	7,290
1916.....	11,087	18,266,080	50	1,085,226	5,043	2,512,346	18	8,793

In 1920 instruments known as "Trust Deeds" to secure Bond issues have not been included as was the case in some counties in previous years.

BUREAU OF MUNICIPAL AFFAIRS

REPORT RE HOUSING

FOR 1920

INCLUDING

REPORTS OF OFFICIALS, STATEMENTS AS TO
OPERATIONS OF HOUSING COMMISSIONS,
PHOTOGRAPHS, ETC.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO

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1921

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To His Honour LIONEL HERBERT CLARKE,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I herewith beg to present for your consideration the Report *re* Housing, of the Bureau of Municipal Affairs, for 1919, which includes Reports of Officials, Statements as to Operations of Housing Commissions, Photographs, etc.

Respectfully submitted,

H. C. NIXON,

Provincial Secretary.

To the Honourable H. C. NIXON,

Provincial Secretary of the Province of Ontario.

SIR,—I have the honour to submit for your approval the Report *re* Housing, of the Bureau of Municipal Affairs, for 1919, which includes Reports of Officials, Statements as to Operations of Housing Commissions, Photographs, etc.

I have the honour to be, Sir,

Your obedient servant,

J. A. ELLIS,

Director of the Bureau of Municipal Affairs.

REPORT OF DIRECTOR

This Report deals with the work which has been done under The Ontario Housing Act, 1919, in the year 1920, and also with the work which has been done under The Municipal Housing Act, 1920, in that year.

Amendments to The Ontario Housing Act, 1919.

The Ontario Housing Act, 1919, was amended at the last Session of the Ontario Legislature as follows:

1. Section 2 of The Ontario Housing Act, 1919, is repealed, and the following substituted therefor:

(1) This Act shall apply to any local municipality, the Council of which has, before the date on which The Municipal Housing Act, 1920, comes into force, passed a by-law declaring that it shall apply.

2. The Ontario Housing Act, 1919, is amended by adding the following section 2a:

2a. No commission shall make, nor shall the director approve of, any loan under the provisions of this Act after the 31st day of December, 1920, but this shall not prevent payments after that date on account of loans made by a commission and approved by the director.

3. Section 6 of The Ontario Housing Act, 1919, is amended by adding at the end thereof the following words: "and the money so borrowed may be paid out of the Consolidated Revenue Fund of Ontario for the purposes of this Act, and as provided by section 7," and the said section as so amended shall be read and construed as if it had been originally enacted as hereby amended.

4. Subsections 2 and 3 of section 11 and sections 11 (a) and 11 (b) of The Ontario Housing Act, 1919, are repealed, and the following substituted therefor:

(2) Except as provided by subsection 3, the cost of a house with less than six rooms and the land on which it is erected, shall not exceed \$3,500, and the cost of a house with six rooms or more and the land on which it is erected shall not exceed \$4,000.

(3) With the approval of the Director,

(a) The cost of a house of less than six rooms constructed with walls of brick veneer and the land on which it is erected, shall not exceed \$4,000, and the cost of a house of six rooms or more constructed with walls of brick veneer and the land on which it is erected shall not exceed \$4,500.

(b) The cost of a house constructed with walls of brick, hollow tile, stone or concrete, and with roofing of fireproof materials and the land on which it is erected shall not exceed \$4,500.

The effect of these amendments was to increase the amounts which might be allowed for the cost of the construction of houses. Also to provide that operations under The Ontario Housing Act, 1919, would in due course be wound up.

The Municipal Housing Act, 1920.

This Act was passed at the last Session of The Ontario Legislature, and is intended to take the place of The Ontario Housing Act, 1919.

The two Acts are almost entirely similar, except that the amount which might be expended for the construction of a house is slightly greater under The Municipal Housing Act, 1920; and that Municipalities are required to issue their own debentures for Housing purposes which may be guaranteed by the Province instead of the money being loaned by the Province to the Municipalities.

The following Municipalities have passed by-laws to come under the provisions of The Municipal Housing Act, 1920: The Cities of Belleville, Chatham, London, Peterborough, Sarnia, Sault Ste. Marie, and Windsor; and the Towns of Fergus, Ford City, Kitchener, Sudbury and Walkerville.

Belleville, Peterborough and Sault Ste. Marie have not erected houses under that Act, and have no debentures guaranteed by the Province.

Under the provisions of that Act the Province has guaranteed the following debentures of the Municipalities mentioned:

Chatham	\$25,000.00
Fergus	10,000.00
Ford City	100,000.00
Kitchener	135,000.00
Sarnia	50,000.00
Sudbury	150,000.00
Walkerville	400,000.00
Windsor	125,000.00
	<hr/>
	\$995,000.00

Cost of Houses:

During 1920 the cost of constructing houses increased slightly over the already high cost of construction in 1919. In the latter part of 1920 though, there was a slight decrease, and everything points to the fact that there will be quite an appreciable decrease in 1921.

Shortage of Houses:

There is still a great shortage of houses in nearly all the urban centres of population. My estimate of such shortage is at least 20,000.

Housing Commissions:

There are now 99 municipalities which have passed by-laws under the provisions of The Ontario Housing Act, 1919, and appointed Housing Commissions. Of these 19 are cities, 50 are towns, 17 are villages, and 13 are townships. Seventy-two Municipalities have constructed houses.

As already mentioned 7 cities and 5 towns have passed by-laws to come under the provisions of The Municipal Housing Act, 1920.

Housing Companies:

The following companies have become incorporated under The Housing Accommodation Act (R.S.O., 1914, chapter 220) for the purpose of erecting houses either under the provisions of The Ontario Housing Act, 1919, or The Municipal Housing Act, 1920:

- Fergus*—The Fergus Housing Co., Ltd.
 **Galt*—Galt Industrial Housing Co.
 **Hamilton*—The Wentworth Construction Housing Co., Ltd.
Hawkesbury—The Riordan Annex Housing Co., Ltd.
Iroquois Falls—The Iroquois Falls Housing Co., Ltd.
Kitchener and Waterloo.—The Dominion Rubber System Housing Co.,
 Waterloo, Ltd.
Kitchener.—The Waterloo County Housing Co., Ltd.
Leaside.—The Leaside Housing Co., Ltd.
Listowel.—The Listowel Housing Co., Ltd.
 **Sarnia*.—The Home Building Association, Ltd.
 **St. Catharines*.—The St. Catharines Housing Co., Ltd.
 **Stratford*.—The Classic Housing Co., Ltd.
 The Stratford Housing Co., Ltd.
 **Sudbury*.—The Sudbury Housing Association, Ltd.
Walkerville.—The Border Cities Housing Co., Ltd.
 The Companies marked * have not yet erected houses.

Appropriations:

The Dominion Government appropriated \$25,000,000 to be loaned, *pro rata* to population, to the various municipalities for Housing purposes. This was to be loaned at 5 per cent. and the provinces were to re-loan it at the same amount. The Province of Ontario's share of the \$25,000,000 is \$8,750,000.

The total amount appropriated to municipalities by the Province by Order-in-Council is \$10,694,000. Of this, \$5,125,000 was appropriated to seventeen cities; \$3,809,000 was appropriated to forty towns; \$635,000 was appropriated to sixteen villages; and \$1,125,000 was appropriated to eleven townships.

Loans:

The total loans approved for houses erected in 1919 and 1920, under The Ontario Housing Act, 1919, is \$7,119,352.74. Of this, \$3,697,514.71 was loaned to seventeen cities; \$2,350,082.52 was loaned to thirty-three towns; \$339,940 was loaned to thirteen villages; and \$731,865.51 was loaned to eight townships. Loans amounting to \$958,150 have also been approved for houses which are not yet erected.

Paid on Loans:

The total amount actually paid by the Province on account of such loans, and the purchase of land for Housing purposes in 1919 and 1920, is \$6,866,551.95. Of this, \$3,818,250.24 was paid to seventeen cities; \$2,126,681.20 was paid to thirty-three towns; \$300,814 was paid to fourteen villages; and \$620,806.51 was paid to eight townships.

Advances to, and Repayments by, Municipalities:

As will be seen from the statement included in this report, the amount actually advanced to municipalities by the Province up to 31st December, 1920, is \$6,866,551.95.

Up to the same date there has been repaid to the Provincial Treasurer, on account of monthly payments, \$165,714.95. There has also been repaid to the Provincial Treasurer the sum of \$100,420.80, on account of loans in excess of the monthly repayments. Up to the same date, the Provincial Treasurer has also received \$102,119.83, for interest on money advanced on progress estimates during construction. These three amounts total \$368,255.58.

No municipalities are in arrears.

The monthly repayments are as a rule remitted promptly on the first of each month.

Houses Erected:

A summary of the houses erected in 1919, under The Ontario Housing Act, 1919, is as follows:

Houses Erected:

No. of Houses		Loans		Average Loan per house	
		\$	c.	\$	c.
14	Four roomed, frame clapboard finish.....	27,700	00	1,978	57
3	“ solid brick, hollow tile or concrete.....	7,575	00	2,525	00
43	Five roomed, frame clapboard finish.....	115,489	00	2,685	79
26	“ frame stucco finish.....	77,050	00	2,963	46
23	“ brick veneer.....	67,270	00	2,924	78
44	“ solid brick, hollow tile, or concrete.....	124,630	00	2,832	50
237	Six roomed, frame clapboard finish.....	662,299	00	2,794	09
88	“ frame stucco finish.....	257,274	00	2,923	57
230	“ brick veneer.....	678,228	00	2,948	82
332	“ solid brick, hollow tile, or concrete.....	1,185,000	00	3,569	28
13	Over six rooms, frame clapboard finish.....	37,100	00	2,854	61
27	“ frame stucco finish.....	81,000	00	3,000	00
23	“ brick veneer.....	56,675	00	2,464	13
81	“ solid brick, hollow tile or concrete.....	300,684	00	3,712	16
1,184		3,677,974	00	3,106	40

Of the above, 1,060 are detached houses and 124 are semi-detached.

Increases amounting to \$67,772.74 were made in 1920 in loans originally made in 1919.

A summary of the houses erected in 1920 under The Ontario Housing Act, 1919, is as follows:

No. of Houses.		Loans		Average Loan per house	
		\$	c.	\$	c.
36	Four roomed, frame, clapboard finish.....	121,900	00	3,386	11
71	Five roomed, frame, clapboard finish.....	224,216	00	3,157	97
25	“ frame, stucco finish.....	92,600	00	3,704	00
41	“ brick veneer.....	141,050	00	3,440	24
39	“ solid brick, hollow tile or concrete.....	140,590	00	3,604	87
76	Six roomed, frame, clapboard finish.....	234,068	00	3,079	84
63	“ frame, stucco finish.....	245,429	00	3,895	70
199	“ brick veneer.....	712,761	00	3,581	71
301	“ solid brick, hollow tile or concrete.....	1,221,579	00	4,058	40
6	Over six rooms, frame, clapboard finish.....	18,400	00	3,066	67
3	“ frame, stucco finish.....	9,500	00	3,166	67
6	“ brick veneer.....	20,450	00	3,408	33
47	“ solid brick, hollow tile or concrete.....	191,113	00	4,066	23
913		3,373,656	00	3,695	13

Of the above, 833 are detached houses, 50 are semi-detached, and 30 are in groups of three.

In addition to the above, 239 applications for loans, aggregating \$958,150, have been approved under the Ontario Housing Act, 1919, for houses which are not yet erected.

A summary of the houses erected under The Municipal Housing Act, 1920, is as follows:

No. of Houses.		Loans		Average Loan per house	
		\$	c.	\$	c.
1	Four roomed, brick veneer	3,000	00	3,000	00
3	Five roomed, frame, clapboard finish	10,000	00	3,333	33
1	“ brick veneer	4,000	00	4,000	00
3	“ solid brick	13,500	00	4,500	00
6	Six roomed, frame, clapboard finish	21,000	00	3,500	00
4	“ frame, stucco finish	14,000	00	3,500	00
16	“ brick veneer	62,500	00	3,906	03
199	“ solid brick, hollow tile	832,700	00	4,184	42
2	Over six rooms, frame, clapboard finish	6,500	00	3,250	00
1	“ frame, stucco finish	4,000	00	4,000	00
1	“ brick veneer	2,000	00	2,000	00
237		973,200	00	4,106	33

All the above houses are detached.

In addition to the above, 34 applications for loans, aggregating \$126,000, have been approved under The Municipal Housing Act, 1920, for houses which are not yet erected.

It will be seen that 68 per cent. of all the houses erected in 1919 and 1920 are either of brick veneer or of solid construction.

The total number of houses erected in 1919 and 1920 is 2,334, and the loans made therefor amount to \$8,092,602.74.

The average loan per house indicates that there is a reasonable margin of security in the loans made. About two-thirds of the houses erected in 1919 were erected by persons who owned their own lots. Such persons could obtain loans to the full cost of the house, but in a large number of cases the loans were made for less than the full cost. Where houses were built under this plan, the persons building them could make their own contracts for construction.

A very much larger number of the houses erected in 1920 have been erected by Housing Commissions or Housing Companies as developments. The following municipalities have constructed houses in this way:

Brampton, Brantford City, Elmira, Fergus, Galt, Guelph City, Kitchener, Leaside, London, New Toronto, Oshawa, Ottawa, Stratford, Walkerville, Windsor and Woodstock.

The cost of the construction of houses is probably, on the average, 15 per cent. more than the amount given as the average loan per house in the above statements. This 15 per cent. represents approximately the amount paid, in addition to the amount of the loan, by persons who erected houses on their own lots, or who purchased houses from Housing Commissions or Companies.

Land Purchased by Housing Commissions:

The following Commissions purchased land in 1919, for the purpose of erecting houses thereon by the respective Commissions:

Acton	7 lots for	\$2,000.00	averaging \$285.71 per lot
Brantford	10 " "	3,000.00	" 300.00 " "
Elmira	4 " "	640.00	" 160.00 " "
Galt	5 " "	1,250.00	" 250.00 " "
Guelph	11 " "	2,830.00	" 257.27 " "
Hawkesbury	33 " "	9,900.00	" 300.00 " "
London	9 " "	2,350.00	" 261.11 " "
Milverton	8 " "	1,400.00	" 175.00 " "
New Toronto	48 " "	22,368.75	" 466.02 " "
Oshawa	153 " "	24,825.00	" 162.25 " "
St. Catharines	22 " "	4,645.00	" 211.14 " "
Sudbury	17 " "	10,200.00	" 600.00 " "
Welland	4 " "	1,425.00	" 356.25 " "
Ottawa, 42 acres (or 328 lots)	" "	162,000.00	" 493.90 " "
Total	659 " "	\$248,833.75	" \$377.59 " "

The following Commissions purchased land in 1920:

Brampton	12 lots for	\$2,187.00	averaging \$182.25 per lot
Guelph	40 " "	7,880.00	" 197.00 " "
Kitchener	64 " "	14,250.00	" 222.66 " "
Leaside	26 " "	8,670.00	" 333.46 " "
London	97 " "	21,850.00	" 225.25 " "
Port Dalhousie	6 " "	2,130.00	" 355.00 " "
Stratford	156 " "	35,250.00	" 225.00 " "
Walkerville	100 " "	60,000.00	" 600.00 " "
Welland	6 " "	2,929.00	" 488.17 " "
Windsor	87 " "	50,500.00	" 580.46 " "
Woodstock	21 " "	6,079.33	" 289.49 " "
Total	615 " "	\$211,725.33	" \$344.27 " "

The average price per lot of \$377.59, purchased in 1919, is approximately \$10 per foot frontage, and the average price of \$344.27 per lot, purchased in 1920, is approximately \$9.50 per foot frontage. Both prices are reasonable. Where the Commissions purchased blocks of land, these have been subdivided, laid out, and developed.

Before any Housing Legislation was passed, the general expectation was that one of the greatest difficulties would be the acquisition of land for Housing purposes on reasonable terms. The contrary has proved to be the case, and there has been no difficulty whatever in this connection. Special and speedy powers of expropriation, from which there was no appeal, were provided for under both Housing Acts. The existence of these powers may have had something to do with the solution of the land question for Housing purposes, but, as a matter of fact, these powers have only been exercised once, and that only in the case of two lots, which were expropriated in order to complete a block of land which was being used for the erection of houses.

The greatest difficulty has been the high cost of construction.

Developments:

Contained in this report are plans of subdivisions at Kitchener, Stratford and Windsor, which were laid out and approved by the Department's Town Planners.

Also contained in this report are photographs of houses constructed as parts of developments at Guelph, London, Kitchener, New Toronto, Ottawa and Windsor.

Town Planning:

The Department is now engaged upon the preparation of a plan of a model townsite at Kapuskasing, and the layout of same. The proposed townsite presents several interesting features.

The plan will be published in a future report as an illustration of what might be done in the way of laying out of a new townsite, and providing for future development.

Reports of Officials:

The report of the Department's Town Planners is also contained in this report.

Cost of Administration:

The cost to the Province of the administration of the Ontario Housing Act, 1919, up to the end of 1919 is as follows:

Salaries and other remuneration	\$13,718.56
Travelling and other expenses	2,505.77
Contingencies	4,312.16
	<hr/>
	\$20,536.49

This is practically for a period of seven months.

The cost to the Province of the administration of The Ontario Housing Act, 1919, in 1920, and The Municipal Housing Act during 1920, is as follows:

Salaries and other remuneration	\$21,158.67
Travelling and other expenses	3,757.81
Contingencies	3,528.47
Typewriter	121.50
	<hr/>
	\$28,566.45

This is for a period of one year.

This Report is issued by the Bureau of Municipal Affairs.

J. A. ELLIS,

Director.

January 15th, 1921.

Municipalities which have come under the provisions of "The Ontario Housing Act, 1919."

	Amount appropriated by Order- in-Council	Loans approved for houses erected in 1919 and 1920	Loans approved for land pur- chased by Housing Com- missions in 1919 and 1920	Amount actually paid by Province on account of such Loans in 1919 and 1920	Loans approved for houses which are not yet erected
Cities	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
†Belleville.....	25,000 00	19,300 00	.....	19,300 00	.....
Brantford	250,000 00	246,513 00	.....	241,013 00	.....
*†Chatham .....	.....	.....	.....	.....	.....
Fort William ...	250,000 00	36,200 00	.....	36,200 00	.....
Galt.....	200,000 00	34,555 00	1,250 00	35,205 00	.....
Guelph	250,000 00	232,192 04	10,710 00	210,917 04	.....
Hamilton	500,000 00	456,800 00	.....	454,850 00	28,000 00
*†Kitchener.....	.....	.....	.....	.....	.....
†London	400,000 00	375,800 00	24,200 00	393,805 45	.....
Niagara Falls...	300,000 00	290,914 00	.....	290,914 00	.....
Ottawa.....	750,000 00	579,050 00	82,000 00	675,306 97	88,950 00
†Peterboro.....	.....	.....	.....	.....	.....
Port Arthur.....	150,000 00	16,800 00	.....	16,800 00	.....
†Sarnia	100,000 00	89,600 00	.....	83,600 00	3,500 00
†Sault Ste. Marie	200,000 00	197,350 00	.....	197,158 35	.....
St. Catharines ..	150,000 00	144,670 00	4,645 00	147,515 43	.....
Stratford	250,000 00	108,900 00	.....	99,640 00	136,500 00
Welland	250,000 00	115,050 00	4,354 00	107,309 00	.....
†Windsor	1,000,000 00	660,550 00	50,500 00	715,500 00	289,000 00
Woodstock	100,000 00	93,270 67	6,079 33	93,216 00	.....
	5,125,000 00	3,697,514 71	183,738 33	3,818,250 24	545,950 00
Towns	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
*Arthur	25,000 00	.....	.....	.....	.....
Brampton.....	100,000 00	56,320 00	2,187 00	42,586 93	.....
*Brockville .....	.....	.....	.....	.....	.....
*Bridgeburg	50,000 00	.....	.....	.....	.....
*Burlington .....	.....	.....	.....	.....	.....
Capreol.....	41,000 00	41,000 00	.....	41,000 00	.....
*Carleton Place ...	30,000 00	.....	.....	.....	.....
*Chapleau .....	.....	.....	.....	.....	.....
*Cobourg .....	.....	.....	.....	.....	.....
Cochrane	75,000 00	60,900 00	.....	54,100 00	4,000 00
Englehart.....	8,000 00	8,000 00	.....	8,000 00	.....
†Ford City	150,000 00	149,900 00	.....	141,200 00	.....
Fort Frances	4,000 00	4,000 00	.....	4,000 00	.....
Goderich	100,000 00	5,000 00	.....	4,384 00	.....
*Gravenhurst .....	.....	.....	.....	.....	.....
*Haileybury .....	.....	.....	.....	.....	.....
Hawkesbury	150,000 00	120,585 00	8,415 00	130,000 00	.....
*Hespeler.....	50,000 00	.....	.....	.....	.....
Ingersoll.....	75,000 00	45,050 00	.....	36,950 00	.....
Iroquois Falls....	150,000 00	150,000 00	.....	150,000 00	.....
Leamington.....	50,000 00	24,190 00	.....	24,190 00	17,500 00
*Leaside.....	100,000 00	90,450 00	8,670 00	99,450 00	.....
Listowel.....	50,000 00	26,000 00	.....	18,000 00	13,000 00
Merritton.....	25,000 00	19,500 00	.....	18,900 00	.....
Midland	75,000 00	59,048 00	.....	59,048 00	.....
Milton....	20,000 00	12,700 00	.....	9,200 00	4,000 00
Milverton.....	50,000 00	28,800 00	1,400 00	24,900 00	.....
Mimico.....	200,000 00	11,300 00	.....	11,300 00	4,500 00

Municipalities which have come under the Provisions of "The Ontario Housing Act, 1919."—Continued

	Amount appropriated by Order- in-Council	Loans approved for houses erected in 1919 and 1920	Loans approved for land pur- chased by Housing Com- missions in 1919 and 1920	Amount actually paid by Province on account of such Loans in 1919 and 1920	Loans approved for houses which are not yet erected
Towns.—Continued	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
New Toronto	200,000 00	176,065 52	22,368 75	198,434 27	.....
*North Bay .....	.....	.....	.....	.....	.....
*Niagara	30,000 00	.....	.....	.....	.....
Oshawa	600,000 00	518,800 00	24,825 00	345,324 00	.....
*Owen Sound .....	.....	.....	.....	.....	.....
*Palmerston	50,000 00	.....	.....	.....	.....
Paris	66,000 00	66,000 00	.....	65,800 00	.....
Perth	25,000 00	24,500 00	.....	24,500 00	.....
Port Colborne	150,000 00	140,494 00	.....	132,994 00	7,000 00
Renfrew	60,000 00	13,000 00	.....	12,500 00	.....
Sandwich	150,000 00	122,200 00	.....	111,000 00	22,400 00
*Sioux Lookout...	40,000 00	.....	.....	.....	.....
Smith's Falls	60,000 00	18,600 00	.....	11,840 00	4,000 00
Sturgeon Falls ..	60,000 00	12,100 00	.....	12,100 00	.....
†Sudbury	150,000 00	148,530 00	.....	148,530 00	.....
Thorold	50,000 00	41,150 00	.....	41,150 00	.....
Timmins	40,000 00	6,000 00	.....	6,000 00	.....
Trenton	200,000 00	8,600 00	.....	8,600 00	.....
*Uxbridge .....	.....	.....	.....	94,500 00	151,500 00
†Walkerville.....	250,000 00	96,500 00	.....	.....	.....
*Waterloo .....	.....	.....	.....	36,200 00	.....
Whitby	50,000 00	44,800 00	.....	.....	.....
	3,809,000 00	2,350,082 52	67,865 75	2,126,681 20	227,900 00
Villages	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Acton	30,000 00	.....	2,000 00	1,500 00	.....
Beaverton	20,000 00	9,500 00	.....	9,500 00	3,500 00
Chippawa	30,000 00	21,700 00	.....	21,700 00	.....
Elmira	40,000 00	30,596 00	640 00	10,240 00	.....
†Fergus	50,000 00	49,800 00	.....	49,800 00	.....
Georgetown.....	80,000 00	50,550 00	.....	43,200 00	18,700 00
*Hensall .....	.....	.....	.....	.....	.....
Humberstone	50,000 00	12,305 00	.....	12,305 00	.....
*Madoc	30,000 00	.....	.....	.....	.....
Point Edward	30,000 00	26,500 00	.....	14,500 00	.....
Port Credit	100,000 00	33,300 00	.....	33,300 00	.....
Port Dalhousie....	50,000 00	41,389 00	2,130 00	41,919 00	3,600 00
Port McNicoll....	30,000 00	10,100 00	.....	10,100 00	.....
Richmond Hill....	25,000 00	25,000 00	.....	23,550 00	.....
Tara	10,000 00	7,500 00	.....	7,500 00	.....
*Victoria Harbor..	10,000 00	.....	.....	.....	.....
Woodbridge	50,000 00	21,700 00	.....	21,700 00	20,000 00
	635,000 00	339,940 00	4,770 00	300,814 00	45,800 00

Municipalities which have come under the provisions of “ The Ontario Housing Act, 1919.”—Concluded

	Amount appropriated by Order- in-Council	Loans approved for houses erected in 1919 and 1920	Loans approved for land pur- chased by Housing Com- missions in 1919 and 1920	Amount actually paid by Province on account of such Loans in 1919 and 1920	Loans approved for houses which are not yet erected
Townships	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Barton	100,000 00	99,320 51	.....	99,320 51	.....
Brantford.....	50,000 00	30,700 00	.....	39,700 00	.....
Etobicoke.....	150,000 00	99,500 00	.....	73,771 00	44,500 00
*Gloucester .....	.....	.....	.....	.....	.....
Guelph	50,000 00	7,500 00	.....	3,425 00	.....
*Neebing .....	.....	.....	.....	.....	.....
*Pickering.....	30,000 00	.....	.....	.....	.....
Sandwich, E.	55,000 00	54,975 00	.....	54,975 00	.....
*Scarborough	100,000 00	19,800 00	.....	16,300 00	2,000 00
Stamford	30,000 00	29,800 00	.....	28,300 00	.....
*Thorold	30,000 00	.....	.....	.....	.....
*West Oxford	30,000 00	.....	.....	.....	.....
York	500,000 00	390,270 00	.....	314,015 00	92,000 00
	1,125,000 00	731,865 51	.....	620,806 51	138,500 00
Totals of—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Cities	5,125,000 00	3,697,514 71	183,738 33	3,818,250 24	545,950 00
Towns	3,809,000 00	2,350,082 52	67,865 75	2,126,681 20	227,900 00
Villages	635,000 00	339,940 00	4,770 00	300,814 00	45,800 00
Townships.....	1,125,000 00	731,865 51	.....	620,806 51	138,500 00
Grand Total ..	10,694,000 00	7,119,402 74	256,374 08	6,866,551 95	958,150 00

*Municipalities marked thus have not erected houses under the provisions of “The Ontario Housing Act, 1919.”

†Municipalities marked thus have also come under the provisions of “The Municipal Housing Act, 1920.” For particulars as to the work done under the latter Act, see information given under the heading of each municipality.

BARTON TOWNSHIP.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
10		five roomed, solid brick	\$22,180	
	1	six roomed, frame clapboard finish		\$3,000.00
14	9	six roomed, solid brick	40,527	33,613.51
—	—			
24	10		\$62,707	\$36,613.51

BEAVERTON.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
2		six roomed, brick veneer	\$5,500	
	1	six roomed, brick veneer		\$3,500
—	—			
2	1		\$5,500	\$3,500

In addition to the above, one application for a loan of \$3,500 has been approved for a house which has not yet been erected.

An increase of \$500 has been made in a loan originally approved in 1919.

BELLEVILLE.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
1	3	six roomed, frame clapboard finish	\$2,700	\$7,800
	2	six roomed, frame stucco finish		6,800
1		six roomed, brick veneer	2,000	
—	—			
2	5		\$4,700	\$14,600

BRAMPTON.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
1	2	six roomed, brick veneer	\$3,000	\$7,000
	12	six roomed, solid brick		46,320
—	—			
1	14		\$3,000	\$53,320

Of the houses erected in 1920, eight are detached and six are semi-detached.

In addition, the Housing Commission purchased the following land in 1920:

5 lots at \$200.00 each	\$1,000.00
3 lots at 233.33⅓ each	700.00
2 lots at 243.50 each	487.00
—	
10	\$2,187.00

The above mentioned twelve houses are being erected by the Housing Commission on this land. The ten lots purchased have been re-subdivided into twelve lots at an average price of \$182.25 per lot.

BRANTFORD.

HOUSES ERECTED.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
4		five roomed, solid brick	\$11,000	
6		six roomed, solid brick	25,500	
24	21	over six rooms, solid brick	79,500	\$82,113
	10	over six rooms, solid brick, erected by the Housing Commission, and including the cost of the land..		45,000
—	—			
34	31		\$116,000	\$127,113

Increases amounting to \$3,400 were made in 1920 for loans originally approved in 1919.

BRANTFORD TOWNSHIP.

HOUSES ERECTED.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
2		four roomed, frame clapboard finish	\$4,200	
	1	five roomed, solid brick		\$4,000
2		six roomed, frame stucco finish	6,000	
3		six roomed, brick veneer	8,500	
2		over six rooms, solid brick	6,000	
—	—			
9	1		\$24,700	\$4,000

Increases amounting to \$2,000 have been made in loans originally approved in 1919.

CHIPPAWA.

HOUSES ERECTED.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
	1	six roomed, frame clapboard finish		\$2,500
4	1	over six rooms, frame clapboard finish	\$12,000	3,000
	1	over six rooms, brick veneer		3,000
—	—			
4	3		\$12,000	\$8,500

Increases amounting to \$1,200 were made in 1920 in loans originally approved in 1919.

COCHRANE.

HOUSES ERECTED.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
1		five roomed, frame stucco finish	\$2,000	
	3	five roomed, solid brick		\$12,000
2		six roomed, frame stucco finish	6,000	
3	2	six roomed, solid brick	10,500	8,000
1		over six rooms, frame stucco finish	3,000	
3		over six rooms, brick veneer	7,800	
2	1	over six rooms, solid brick	6,700	4,000
—	—			
12	6		\$36,000	\$24,000

Of the above houses, erected in 1920, four are detached and two are semi-detached.

In addition to the above, one application has been made for a loan of \$4,000 for a house which has not yet been erected.

An increase of \$900.00 has been made in a loan originally approved in 1919.

ELMIRA.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
6	6	six roomed, frame clapboard finish	\$15,078	\$15,518
6	6		\$15,078	\$15,518

Six of the above houses were erected by the Housing Commission at a cost of \$15,078. All of the above loans were approved in 1919.

ETOBICOKE TOWNSHIP.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
4		six roomed, frame clapboard finish	\$12,000	
	2	six roomed, brick veneer		\$6,500
4	17	six roomed, solid brick	12,000	69,000
8	19		\$24,000	\$75,500

In addition to the above, thirteen applications for loans, aggregating \$44,500, have been approved for houses which are not yet erected.

FERGUS.

No houses have been erected in Fergus this year under The Ontario Housing Act, 1919.

One six-roomed solid brick house has been erected under The Municipal Housing Act, 1920, for which a loan of \$2,700 has been made.

The Fergus Housing Company, Limited, incorporated in 1919, to operate at Fergus, will probably continue to erect houses under The Municipal Housing Act, 1920.

FORD CITY.

No houses were erected at Ford City in 1920 under The Ontario Housing Act, 1919.

The following houses have been erected under The Municipal Housing Act, 1920:

No. of Houses.			Loans.	
15		six roomed, solid brick	\$67,500	
1		over six rooms, frame clapboard finish	3 500	
1		over six rooms, frame stucco finish	4,000	
17				\$75,000

FORT WILLIAM.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1	1	five roomed, brick veneer	\$3,000	\$3,000
	1	five roomed, solid brick		4,500
2	2	six roomed, frame clapboard finish	6,500	6,600
	4	six roomed, brick veneer		12,600
<hr/>	<hr/>		<hr/>	<hr/>
3	8		\$9,500	\$26,700

GALT.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	3	six roomed, frame clapboard finish		\$8,550
3		six roomed, frame stucco finish	\$7,800	
3	2	six roomed, brick veneer	9,285	6,000
<hr/>	<hr/>		<hr/>	<hr/>
6	5		\$17,085	\$14,550

The Housing Commission has erected six of the above houses at a cost of \$19,405.

Increases amounting to \$2,920 have been made in loans originally approved in 1919.

The Galt Industrial Housing Co., Ltd., although incorporated in 1920, is not constructing houses, nor has the Housing Company purchased any land for Housing purposes.

GEORGETOWN.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	four roomed, frame clapboard finish		\$3,000.00
	2	six roomed, frame clapboard finish		7,650.00
	2	six roomed, frame*stucco finish		7,500.00
	3	six roomed, brick veneer		12,400.00
	5	six roomed, solid brick		20 000.00
<hr/>	<hr/>		<hr/>	<hr/>
	13			\$50,550.00

In addition to the above, five applications for loans, aggregating \$18,700, have been approved for houses which are not yet erected.

GUELPH.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		four roomed, solid brick	\$2,550	
1		five roomed, brick veneer	2,300	
	28	five roomed, solid brick		98,490
5		six roomed, frame stucco finish	13,974	
2		six roomed, brick veneer	5,950	
14	12	six roomed, solid brick	42,782	49,665
	1	over six rooms, solid brick		4,500
<hr/>	<hr/>		<hr/>	<hr/>
23	41		\$57,556	\$152,655

Increases amounting to \$11,981.04 were made in 1920 in loans originally approved in 1919.

The Housing Commission purchased land in 1920 at a cost of \$7,800, on which forty houses have been erected which are shown in the above figures. The land purchased has been subdivided into forty lots which average in price \$197.00 per lot.

GUELPH TOWNSHIP.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
1		six roomed, frame stucco finish	\$3,000	
	1	six roomed, solid brick		\$4,500
—	—			
1	1		\$3,000	\$4,500

HAMILTON.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
2		six roomed, frame clapboard finish	\$6,000	
82	31	six roomed, solid brick	290,150	\$131,105
—	—			
84	31		\$296,150	131,105

In addition to the above, seven applications for loans, aggregating \$28,000, have been approved for houses which are not yet erected.

Increases in loans amounting to \$29,545 have been made in loans originally approved in 1919.

The Wentworth Construction Company, Ltd., was incorporated in 1919 to operate under The Ontario Housing Act, 1919, but the Company has not erected any houses, nor has it purchased land for such purposes.

INGERSOLL.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
	3	five roomed, frame clapboard finish		\$8,100
1		five roomed, frame stucco finish	\$2,200	
5	7	six roomed, frame clapboard finish	12,450	20,000
1		over six rooms, frame clapboard finish	2,300	
—	—			
7	10		\$16,950	\$28,100

KITCHENER.

No. of Houses.			Loans.	
			1920	
1920				
39		six roomed, solid brick, or hollow tile	\$135,000	
—				
39				\$135,000

The above houses have been erected at an approximate cost of \$4,200 each.

The Dominion Rubber System Housing Co., (Kitchener) Limited, purchased seventy-two lots with a frontage of 36 feet each. Sixty-four of these lots have been re-subdivided to make fifty-six lots with a frontage of forty feet. This makes sixty-four lots which were purchased for \$14,250, making the average price per lot \$222.66.

LEAMINGTON.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
4	3	six roomed, frame clapboard finish	\$11,190	\$10,000
1		six roomed, solid brick	3,000	
<hr/>			<hr/>	
5	3		\$14,190	\$10,000

In addition to the above, five applications for loans, aggregating \$17,500, have been approved for houses which are not yet erected.

LEASIDE.

HOUSES ERECTED.

No. of houses.			Loans	
1920			1920	
20		five roomed, brick veneer	\$68,000	
6		six roomed, brick veneer	22,450	
<hr/>			<hr/>	
26			\$90,450	

Of the above houses erected, four are detached and twenty-two are semi-detached.

The actual cost of all these houses was \$121,499.

The Leaside Housing Co., Ltd., has erected the above houses and has also purchased twenty-six lots at a cost of \$8,670, the average price per lot being \$333.46. Eighty-five per cent. of the cost of the houses erected, and the land purchased has been loaned to the Company, the actual loan being \$99,450.

LISTOWEL.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	five roomed, brick veneer		\$2,500
1		six roomed, frame clapboard finish	\$3,000	
8		six roomed, brick veneer	20,000	
<hr/>			<hr/>	
9	1		\$23,000	\$2,500

In addition to the above, four applications for loans, aggregating \$13,000, have been approved for houses which are not yet erected.

An increase amounting to \$500.00 has been made this year in a loan originally approved in 1919.

The Listowel Housing Company did not undertake any new construction this year.

LONDON.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
3	33	four roomed, frame clapboard finish	\$5,300	\$113,400
	18	five roomed, frame clapboard finish		71,916
	15	five roomed, frame stucco finish		58,700
5	13	five roomed, brick veneer	13,570	47,650
	2	six roomed, frame clapboard finish		6,775
14	23	six roomed, brick veneer	37,900	83,200
	1	over six rooms, brick veneer		2,850
—	—			
22	105		\$56,770	\$384,491

The balance required for the above houses in excess of the appropriation, will be provided for under “The Municipal Housing Act, 1920.”

The Housing Commission purchased a block of land known as “Pinelawn” for \$14,000. There are eighty lots in this block of land, and the cost of these lots average \$175.00 each. The Commission also purchased seventeen lots on Garfield Avenue for \$7,850, which average \$462.00 each in price.

MERRITON.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		four roomed, frame clapboard finish	\$2,300	
	1	five roomed, frame clapboard finish		\$3,000
1	1	five roomed, frame stucco finish	2,500	3,000
1	1	six roomed, frame clapboard finish	2,700	3,000
	1	six roomed, frame stucco finish		3,000
—	—			
3	4		\$7,500	\$12,000

MILTON.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
2		five roomed, brick veneer	\$5,200	
	1	six roomed, brick veneer		\$3,500
	1	six roomed, solid brick		4,000
—	—			
2	2		\$5,200	\$7,500

In addition to the above, one loan has been approved for \$4,000 for a house which has not yet been erected.

MIMICO.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		five roomed, solid brick	\$2,800	
1	1	six roomed, solid brick	4,000	\$4,500
—	—			
2	1		\$6,800	\$4,500

NEW TORONTO.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
20	1	five roomed, solid brick, hollow tile or concrete	\$60,000	\$4,600
	1	six roomed, brick veneer		3,600
25	5	six roomed, solid brick, hollow tile or concrete	75,000	16,500
45	7		\$135,000	\$24,700

Of the above, eighteen are detached houses, and thirty-four are semi-detached.
Increases amounting to \$16,365.52 have been made in loans originally approved in 1919.

NIAGARA FALLS.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1	1	Five roomed, frame clapboard finish	\$2,000	\$3,000
	2	five roomed, brick veneer		6,800
57	4	six roomed, frame clapboard finish	176,515	12,000
	1	six roomed, frame stucco finish		3,500
12	3	six roomed, brick veneer	38,375	7,500
	1	six roomed, solid brick		4,000
1		over six rooms, frame clapboard finish	3,000	
1		over six rooms, frame stucco finish	3,475	
5		over six rooms, brick veneer	15,400	
2		over six rooms, solid brick	7,000	
79	12		\$245,765	\$36 800

A number of increases in the loans previously reported for houses erected in 1919 have been made.

OSHAWA.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		four roomed, frame clapboard finish	\$1,600	
	25	five roomed, frame clapboard finish		\$67,500
4		five roomed, brick veneer	10,000	
	32	six roomed, frame stucco finish		130,975
66	26	six roomed, brick veneer	206,900	93,825
3		six roomed, solid brick	8,000	
74	83		\$226,500	\$292,300

OTTAWA.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	five roomed, frame clapboard finish		\$3,500
2		five roomed, solid brick	\$8,000	
3		six roomed, frame clapboard finish	9,000	
10	1	six roomed, frame stucco finish	30,000	3,500
6	64	six roomed, brick veneer	18,000	256,000
15	19	six roomed, solid brick	60,000	76,000
1		over six rooms, frame stucco finish	3,000	
3	1	over six rooms, brick veneer	9,000	4,000
16	7	over six rooms, solid brick	64,000	28,000
56	93		\$201,000	\$371,000

In addition to the above, twenty-two applications for loans, aggregating \$88,950, have been approved for houses which are not yet erected.

PERTH.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1	1	four roomed, frame clapboard finish	\$2,500	\$2,300
3		five roomed, frame clapboard finish	8,220	
3	1	six roomed, frame clapboard finish	8,980	2,500
—	—			
7	2		\$19,700	\$4,800

POINT EDWARD.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
3	3	six roomed, frame clapboard finish	\$9,000	\$10,500
	1	six roomed, brick veneer		4,000
1		over six rooms, frame clapboard finish	3,000	
—	—			
4	4		\$12,000	\$14,500

PORT ARTHUR.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
2	1	five roomed, frame clapboard finish.....	\$6,000	\$4,000
2		six roomed, frame clapboard finish.....	5,400	
—	—			
4	1		\$11,400	\$4,000

Increases amounting to \$1,400 have been made in loans originally approved in 1919.

PORT COLBORNE.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
9	4	six roomed, frame clapboard finish.....	\$20,494	\$14,600
5		six roomed, frame stucco finish.....	14,700	
10	3	six roomed, brick veneer.....	30,000	12,500
	3	six roomed, solid brick.....		12,000
1	1	over six rooms, frame clapboard finish.....	3,000	3,200
	2	over six rooms, frame stucco finish.....		6,500
1	5	over six rooms, solid brick	3,500	20,000
—	—			
26	18		\$71,694	\$68,800

In addition to the above, two applications for loans, aggregating \$7,000 have been approved for houses which are not yet erected.

PORT CREDIT.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		four roomed, solid brick.....	\$1,500	
6		five roomed, solid brick	18,000	
	3	six roomed, solid brick.....		\$11,500
—	—			
7	3		\$19,500	\$11,500

Increases amounting to \$2,300 were made this year in loans originally approved in 1919.

PORT DALHOUSIE.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
5		five roomed frame clapboard finish.....	\$12,389	
	1	six roomed frame clapboard finish.....		\$3,275
	5	six roomed frame stucco finish.....		17,254
	2	six roomed brick veneer.....		8,336
—	—			
5	8		\$12,389	\$28,865

In addition to the above, one application for a loan of \$3.600 has been approved for a house which is not yet erected.

An increase amounting to \$135.00 was made in 1920, in a loan originally approved in 1919.

The Housing Commission purchased six lots for \$2,130 the average price per lot is \$355.00.

PORT McNICOLL.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	& 1920		1919 & 1920	
	3	six roomed, frame clapboard finish.....	\$9,000	

Increases amounting to \$1,100 have been made in two of the above loans. All the loans were originally approved in 1919.

RENFREW.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	2	five roomed, frame clapboard finish.....		\$6,000
2		six roomed, frame stucco finish	\$6,000	
—	—			
2	2		\$6,000	\$6,000

Increases amounting to \$1,000 have been made in loans originally approved in 1919.

RICHMOND HILL.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	2	six roomed, frame clapboard finish.....		\$6,200
	1	six roomed, frame stucco finish.....		3,500
1	4	six roomed, brick veneer.....	\$2,500	12,800
<hr/>			<hr/>	
1	7		\$2,500	\$22,500

SANDWICH.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
1		five roomed, solid brick.....	\$1,200	
1	13	six roomed, frame clapboard finish.....	2,600	\$41,300
2		six roomed, frame stucco finish.....	5,500	
	1	six roomed, brick veneer.....		3,600
2		six roomed, solid brick	8,000	
2	13	over six roomed, solid brick	8,000	52,000
<hr/>			<hr/>	
6	27		\$25,300	\$96,900

In addition to the above, six applications for loans, aggregating \$22,400 have been approved for houses which are not yet erected.

SARNIA.

HOUSES ERECTED.

“The Ontario Housing Act, 1919.”

No. of Houses.			Loans.	
1919	1920		1919	1920
2		four roomed, frame clapboard finish.....	\$4,900	
16	3	five roomed, frame clapboard finish.....	48,000	\$9,400
	1	five roomed, brick veneer.....		3,500
	8	six roomed, frame clapboard finish.....		23,800
<hr/>			<hr/>	
18	12		\$52,900	\$36,700

In addition to the above, one application for a loan, aggregating \$3,500 has been approved for a house which is not yet erected.

SARNIA.

“The Municipal Housing Act, 1920.”

The Home Building Association, Limited, has been incorporated as a Housing Company, but the Company has not erected any houses nor purchased any land for such purposes.

Ten applications for loans, aggregating \$35,500 have been approved for houses which are not yet erected.

SAULT STE. MARIE.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
1		four roomed, frame clapboard finish.....	\$2,000	
11	1	five roomed, frame clapboard finish.....	34,850	\$3,600
13	2	five roomed, frame stucco finish.....	42,400	7,200
8	1	five roomed, brick veneer.....	26,400	3,600
8		six roomed, frame clapboard finish.....	25,800	
1		six roomed, frame stucco finish.....	3,600	
13		six roomed, brick veneer.....	39,100	
2		six roomed, solid brick.....	6,300	
57	4		\$180,450	\$14,400

Increases amounting to \$2,500 were made in 1920, in loans originally approved in 1919.

SCARBOROUGH TOWNSHIP.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
	1	five roomed, frame clapboard finish		\$1,300
	1	five roomed, frame stucco finish		2,700
	1	five roomed, solid brick		2,500
	1	six roomed, brick veneer		3,000
	3	six roomed, solid brick ..		10,300
	7			\$19,800

In addition to the above, one application for a loan of \$2,000 has been approved for a house which is not yet erected.

SMITH'S FALLS.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
	1	six roomed, brick veneer		\$3,500
	3	six roomed, solid brick		11,100
1		over six rooms, solid brick	\$4,000	
1	4		\$4,000	\$14,600

In addition to the above, one application for a loan of \$4,000 has been approved for a house which has not yet been erected.

The Housing Commission is erecting the three houses shown above, at a cost of \$11,100 and also purchased three lots from the Municipal Corporation at a nominal price.

ST. CATHARINES.

No. of Houses.			Loans.	
			1919	1920
1919	1920			
7	6	five roomed, frame clapboard finish	\$16,350	\$19,200
25	1	six roomed, frame clapboard finish	71,420	3,200
7	2	six roomed, frame stucco finish	20,200	6,400
1		six roomed, solid brick	2,800	
1	1	over six rooms, frame clapboard finish	2,300	2,800
41	10		\$113,070	\$31,600

The six houses noted above, to cost \$19,200 were erected by the Housing Commission on land which was purchased in 1919.

The St. Catharines Housing Co., Ltd., has been incorporated, but the Company has not yet erected any houses nor purchased any land for such purposes.

STAMFORD TOWNSHIP.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	five roomed, frame clapboard finish		\$3,000
2	1	six roomed, frame clapboard finish	\$6,000	3,800
1		six roomed, brick veneer	3,000	
1		six roomed, solid brick	4,000	
	2	over six rooms, frame clapboard finish		6,400
	1	over six rooms, frame stucco		3,000
4	5		\$13,000	\$16,200

Increases amounting to \$600.00 have been approved in loans originally made in 1919.

STRATFORD.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	five roomed, frame clapboard finish		\$2,700
7	30	six roomed, brick veneer	\$18,400	87,800
7	31		\$18,400	\$90,500

In addition to the above, two applications for loans, aggregating \$6,500 have been approved for houses which are not yet erected.

A loan has also been approved to The Classic Housing Co., Ltd., for \$30,000. The Company has also purchased fifteen lots at a price of \$5,250 the average price per lot of \$350.00.

A loan has also been approved to The Stratford Housing Co., Ltd., for \$100,000. The Company has also purchased eighteen acres of land at a price of \$30,000, which has been resubdivided into 141 lots, making the average price per lot \$212.77.

STURGEON FALLS.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
3	1	six roomed, frame clapboard finish	\$8,500	\$3,600
3	1		\$8,500	\$3,600

SUDBURY.

HOUSES ERECTED.

“The Ontario Housing Act, 1920.”

No. of Houses.			Loans.	
1919	1920		1919	1920
2	2	four roomed, frame clapboard finish	\$3,000	\$5,500
2		five roomed, frame stucco finish	6,000	
	1	five roomed, solid brick		4,000
3	2	six roomed, frame clapboard finish	9,000	6,000
22	5	six roomed, brick veneer	66,000	17,500
1	2	six roomed, solid brick	4,000	8,500
1	1	over six rooms, frame clapboard finish	3,000	3,000
1	2	over six rooms, brick veneer	3,000	7,000
32	15		\$94,000	\$51,500

Increases amounting to \$3,030 have been made in loans originally approved in 1919.

SUDBURY.

HOUSES ERECTED.

“ The Municipal Housing Act, 1920.”

No. of Houses.		Loans.
1920		1920
1	four roomed, brick veneer	\$3,000
1	six roomed, frame clapboard finish	3,500
7	six roomed, brick veneer	26,500
3	six roomed, solid brick	13,500
1	over six rooms, frame clapboard finish	3,000
1	over six rooms, brick veneer	2,000
<hr/>		
14		\$51,500

In addition to the above, thirteen applications for loans, aggregating \$46,500 have been approved for houses which are not yet erected.

The Sudbury Housing Association, Ltd., has been incorporated, but the Company has not erected any houses under either of the Housing Acts.

TARA.

HOUSES ERECTED.

No. of Houses.		Loans.
1919	1920	1919 1920
1	1	over six rooms, solid brick \$4,000 \$3,500
<hr/>		
1	1	\$4,000 \$3,500

THOROLD.

HOUSES ERECTED.

No. of Houses.		Loans.
1919	1920	1919 1920
1		four roomed, frame clapboard finish \$1,900
3	4	five roomed, frame clapboard finish 8,500 12,000
7		six roomed, frame clapboard finish 18,500
<hr/>		
11	4	\$28,900 \$12,000

An increase of \$250.00 has been approved in 1920 for a loan originally approved in 1919.

TIMMINS.

HOUSES ERECTED.

No. of Houses.		Loans.
1919	1920	1919 1920
1	1	six roomed, frame clapboard finish \$3,000 \$3,000
<hr/>		
1	1	\$3,000 \$3,000

WALKERVILLE.

HOUSES ERECTED.

“The Ontario Housing Act, 1919.”

No. of Houses.			Loans.	
1919	1920		1919	1920
1	2	five roomed, frame clapboard finish.....	\$3,000	\$6,000
3		five roomed, frame stucco finish.....	9,000	
1		five roomed, brick veneer.....	3,000	
3		six roomed, frame clapboard finish.....	9,000	
2		six roomed, brick veneer	6,000	
2	9	six roomed, solid brick.....	8,000	36,500
2		over six rooms, frame stucco finish.....	6,000	
2	1	over six rooms, solid brick	6,000	4,000
16	12		\$50,000	\$46,500

In addition to the above, four applications for loans, aggregating \$18,000 have been approved for houses which are not yet erected.

A loan has also been approved to The Border Cities Housing Co., Ltd., for \$133,500 towards the cost of the erection of one hundred houses, and the purchase of one hundred lots. The balance of the amount required for the construction of these houses, and the purchase of the lots is being furnished under The Municipal Housing Act, 1920.

WALKERVILLE.

HOUSES ERECTED.

“The Municipal Housing Act, 1920.”

The Border Cities Housing Co., Ltd., has erected one hundred houses of the six roomed, solid brick class. The Company has also purchased one hundred lots for \$60,000, averaging in price per lot \$600.00. The average price of each house will be about \$4,900.

WELLAND.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	five roomed, solid brick		\$4,500
5		six roomed, frame clapboard finish	\$14,200	
3		six roomed, brick veneer	9,000	
11	10	six roomed, solid brick	42 450	44,400
19	11		\$65,650	\$48,900

In addition The Housing Commission purchased three lots at \$646.33½ each, totalling \$1,939; three lots at \$330.00 each, totalling \$990.00; and propose to erect houses on these lots.

An increase of \$500.00 has been made in a loan originally approved in 1919

WHITBY.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	2	five roomed, brick veneer		\$6,000
1	1	six roomed, frame clapboard finish.....	\$2,000	3,500
1	7	six roomed, brick veneer	2,800	23,500
1		over six rooms, frame clapboard finish.....	3,000	
	1	over six rooms, brick veneer		3,600
—	—			
3	11		\$7,800	\$36,600

An increase amounting to \$400.00 has been made in a loan originally approved in 1919.

WINDSOR.

HOUSES ERECTED.

“The Ontario Housing Act, 1919.”

No. of Houses.			Loans.	
1919	1920		1919	1920
4		five roomed, frame clapboard finish.....	\$12,000	
3		five roomed, frame stucco finish.....	9,000	
1		five roomed, brick veneer	3,000	
29	1	six roomed, frame clapboard finish.....	87,000	\$3,000
9	1	six roomed, frame stucco finish.....	27,000	3,000
10		six roomed, brick veneer	30,000	
39	81	six roomed, solid brick, hollow tile or concrete.....	156,000	325,500
—	—			
95	83		\$324,000	\$331,500

Of the above houses, 128 are detached, twenty semi-detached, and thirty in groups of three.

In addition to the above, seventy-two applications for loans; aggregating \$289,000 have been approved for houses which are not yet erected.

Increases amounting to \$5,000 have been made in loans originally approved in 1919.

The Housing Commission has purchased twelve and one-half acres of land (about eighty-seven lots) at a price of \$50,500. The average price per lot is \$580.46. Fifty of the above eighty-one houses are erected on this land.

WINDSOR.

HOUSES ERECTED.

“The Municipal Housing Act, 1920.”

No. of Houses.			Loans.	
1920.				1920.
3		five roomed, frame clapboard finish		\$10,500
1		five roomed, brick veneer		4,000
3		five roomed, solid brick, hollow tile or concrete.....		13,500
5		six roomed, frame clapboard finish.....		17,500
4		six roomed, frame stucco finish.....		14,000
9		six roomed, brick veneer		36,000
41		six roomed, solid brick, hollow tile or concrete.....		184,000
—				
66				\$279,500

In addition to the above, eleven applications for loans, aggregating \$44,000 have been approved for houses which are not yet erected.

WOODBIDGE.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
	1	four roomed, frame clapboard finish		\$2,500
3	2	five roomed, solid brick	\$9,000	6,000
<u>3</u>	<u>3</u>		<u>\$9,000</u>	<u>\$8,500</u>

In addition to the above, five applications for loans, aggregating \$20,000 have been approved for houses which are not yet erected.

Increases in loans amounting to \$4,200 have been made in loans originally approved in 1919.

WOODSTOCK.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
2	6	five roomed, frame stucco finish.....	\$4,350	\$21,000
1		six roomed, frame clapboard finish.....	2,700	
3	15	six roomed, frame stucco finish.....	8,300	60,000
1		six roomed, frame stucco and shingles.....	3,000	
<u>7</u>	<u>21</u>		<u>\$18,350</u>	<u>\$81,000</u>

The Housing Commission is erecting the above twenty-one houses, and purchased twenty-one lots at a total cost of \$6,079.33. The average price per lot is \$289.49. The cost of the land is included in the above figures.

YORK TOWNSHIP.

HOUSES ERECTED.

No. of Houses.			Loans.	
1919	1920		1919	1920
2	1	six roomed, frame clapboard finish	\$5,800	\$2,400
9	7	six roomed, brick veneer	24,100	22,750
29	58	six roomed, solid brick	95,144	240,076
<u>40</u>	<u>66</u>		<u>\$125,044</u>	<u>\$265,226</u>

Of the houses erected in 1920, sixty-two are detached, and four are semi-detached.

In addition to the above, twenty-three applications for loans, aggregating \$92,000 have been approved for houses which are not yet erected.

REPORT OF DEPARTMENT'S TOWN PLANNERS

In accordance with your request, we have prepared the following report on what has come under our consideration in providing consulting advice in town planning to the municipalities operating under the Ontario Government Acts.

In reviewing these matters, it has been very gratifying to note the progress which has been made, and the way that the basic principles of housing have been accepted by the various Housing Commissions of the Province.

A large proportion of the advice which we have been able to give during the past year has been in the guidance of housing developments, in which the areas considered, and purchased, in many cases, not only provided a sufficient number of houses to care for the applications of the current year, but also for sufficient area to allow for the probable requirements of a following year to be planned for in one development. This provision for future area has not in every case been made by purchases from the housing funds, but has in some cases been made by the Housing Companies, who are holding the additional land themselves for this purpose, and in other cases, by the Municipalities who have secured it, and are holding it in a similar manner.

SUBDIVISION OF AREAS FOR HOUSING DEVELOPMENTS.

The method of planning for the subdivision of a larger number of lots in the original plan than is required for the appropriation of one year, allows the officials of the Commission, or Company, to provide more economical housing than can be obtained by purchasing only a sufficient number of lots for the actual applications; for the reason that, first, several of the Commissions have been able to obtain their best prices from awarding tenders for groups of houses from the same plan, and in developments where sufficient space has been secured, ten to fifty houses may be located by distributing them over the property. The houses on the intermediate lots can be constructed by future contracts awarded by the Company or Commission, or by individuals in case the Commission has ceased to operate. Care in this regard will prevent in the completed development the monotony in appearance which is so often obtained by building a number of houses of the same type; second, the subdivision of a larger block of land allows that a reasonable percentage of its total area may economically provide for parks, play grounds, and open spaces of such size as would not be obtainable otherwise; and third, the arrangement of houses along the streets of a housing development can be made and controlled by the Commission in such a way that an additional variance is obtained when the plans and the elevations of the houses are necessarily somewhat similar.

DIFFERENT TYPES OF DEVELOPMENTS.

The housing developments on which we have assisted, have taken two distinct forms, the first being where the Municipal Housing Commission have planned and executed the development themselves, and the second, where a Housing Company has been formed, taking full charge and responsibility itself for the development, under the general supervision of the Local Commission.

COMMISSION DEVELOPMENTS.

Some of the developments upon which we have assisted the Municipal Commissions during the last year are those of Guelph, London (two), Ottawa, Sudbury, Windsor. In the Oshawa development which was planned last year, we assisted the Commission in locating forty or fifty houses which were built under two separate contracts. In allocating these houses they retained a sufficient number of lots throughout their development to insure considerable variety when these are built upon with houses of varied types. In the Lindenlea development, at Ottawa, forty or fifty houses under a single contract were similarly located.

We have felt that the conditions under which many of our Commissions have been operating during the last year, warranted us in acceding to their wishes, and assisting them in this, by studying the ultimate appearance of the project to this end, particularly as the economy effected by this method has been rather large, and as we are satisfied that the immediate effect of similarity will be lost when houses of a different type are erected on the intermediate lots.

In London, the Commission thought it wise to undertake two developments, one, that of Pine-Lawn, being planned for a cheaper type of house, near the industrial district, and that of Garfield Avenue to provide for the requirements of a better class of house in a residential section of the city.

In the Windsor development, the Commission has made the first use, which has come to our attention, of the three unit type of house, in conjunction with the detached and the semi-detached house, the latter being a combination of the detached plan. Their property, which was a parcel from an old subdivision which provided for lanes, together with other considerations, made this selection of types seem most practical.

We have found that in the consideration of undertaking a housing development by a Commission itself, care should be taken to see that, if their programme is to be limited to one development, that this development should be so located as to be central to all sections of the municipality most in need of housing, otherwise it will probably be found more satisfactory to divide the area under consideration into two or more developments, in different sections of the town, as this method would provide more happily for the local demand. Many municipalities have provided for this by caring for private applications throughout their area, in addition to their main development.

HOUSING COMPANIES.

Among the developments which have been undertaken by Housing Companies upon which we have been called for advice, are, one in Walkerville, two in Stratford, and one in Kitchener. We have found that in all of these developments, the Companies have been inclined to go even further than actually meeting our requirements, and in some cases are planning the surroundings of the houses in view of undertaking moderate beautification of their developments. They plan to offer their services to their applicants to obtain for them further economy in matters such as planting trees and shrubs, sodding, etc., which may not be actually included with the sale of the property. The Municipal Commissions might, we think, consider this same policy, possibly in connection with their Parks Departments, where they have not already done so. The effect of this assistance will be that the development will immediately present the attractive finished appearance that a municipal undertaking of this nature should present.

INDIVIDUAL BLOCK PLANS.

The individual block plans which have come before us during this period, have shown, on the whole, that considerable careful attention has been given to them, by the various Commissions, to insure that full information is given in accordance with the suggestions of the outline in the Report of 1919.

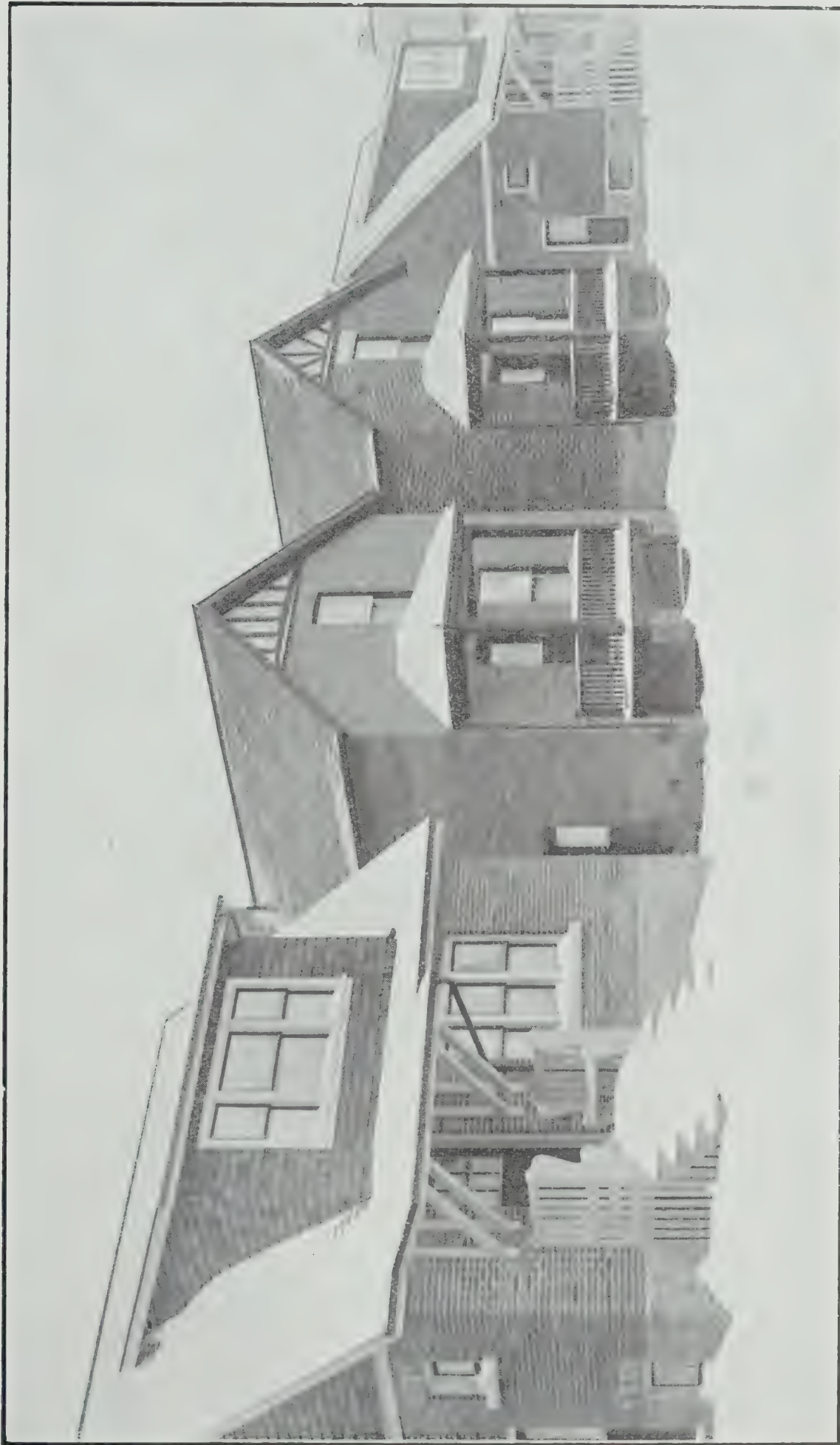
We think it might be well to point out that when application is received, and the block plans are submitted under the Housing Act of 1920, we feel that our disposition of its questions is generally more advisory than mandatory to the Commission. The officials of the Commissions should therefore, in future block plans, be even more careful in supplying accurate information, and make more careful note of instances where, for example, a portion of the lot has a rocky surface, or where it is located in a section through which drainage, to existing drains, is difficult, so that our advice may be of the greatest value in the case of single lots.

IN CONCLUSION.

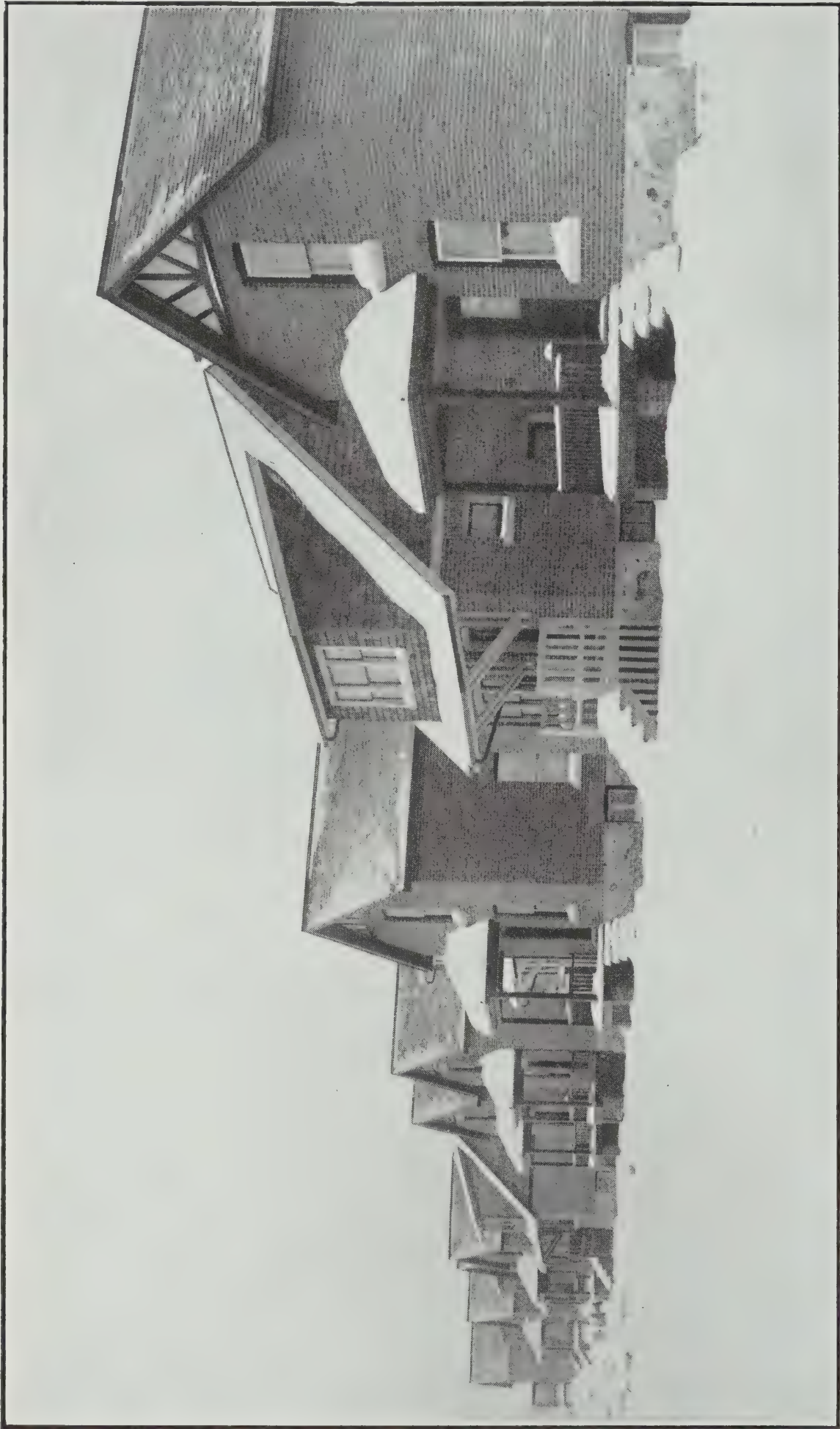
In the advice which we have given to the Commissions, and Housing Companies, by whom we have been consulted, we have endeavoured to make such suggestions as would insure the best results that governing conditions would permit. In carrying out the above duties, we wish to thank the members and officials of the Local Commissions and the various Housing Companies for the co-operation which they have given us, and to commend them for the progressive spirit with which they have undertaken and carried out their work. By this co-operation they have interpreted the ideas of your Department in housing matters, to their citizens, by the most practical method of all, that of actual building, and by the solution of their difficulties they have furnished data to your officials, from which their original ideas could either be justified or revised.

W. E. HARRIES and A. V. HALL,

Town Planners.



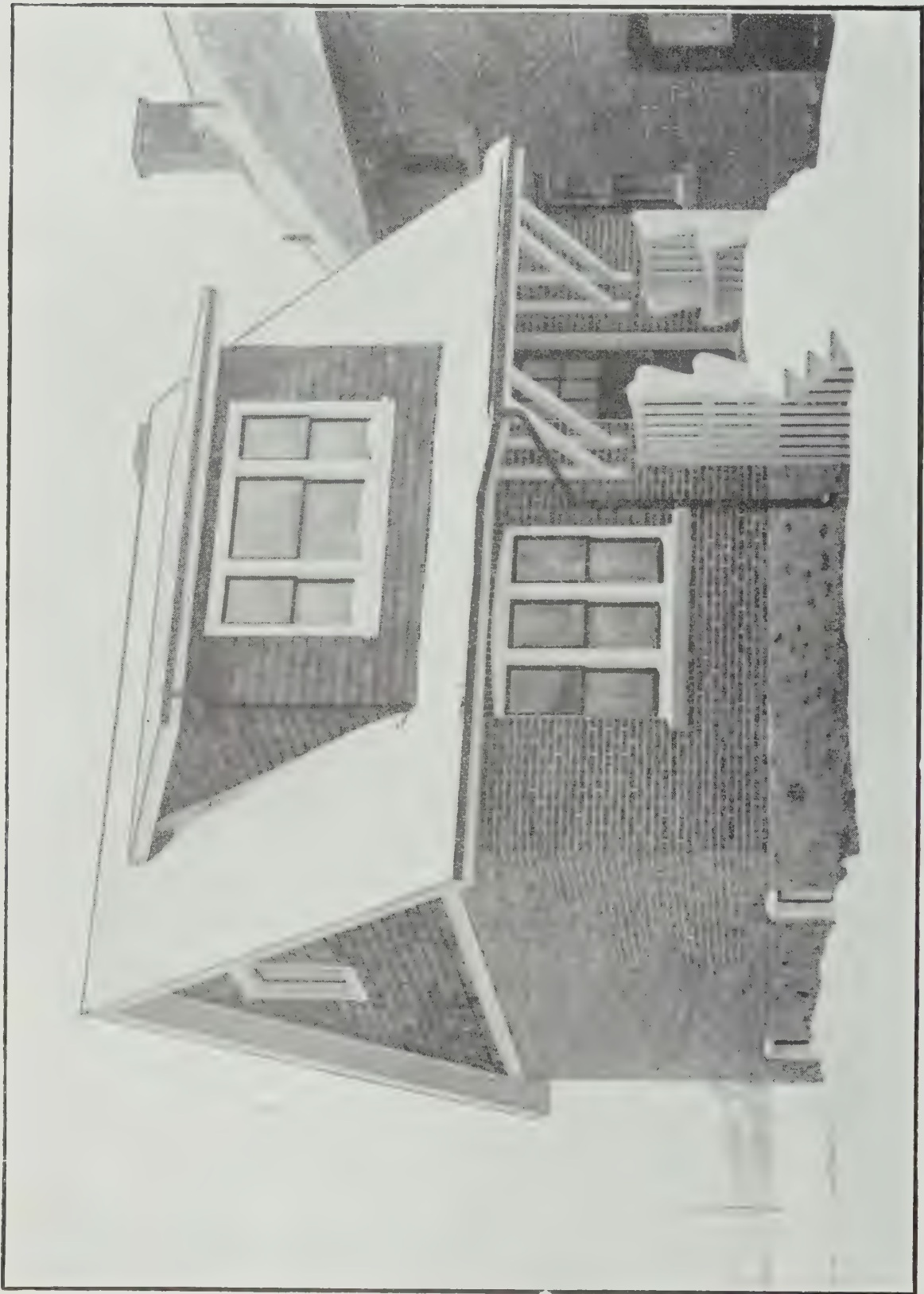
HOUSES ERECTED AT GUELPH BY GUELPH HOUSING COMMISSION.



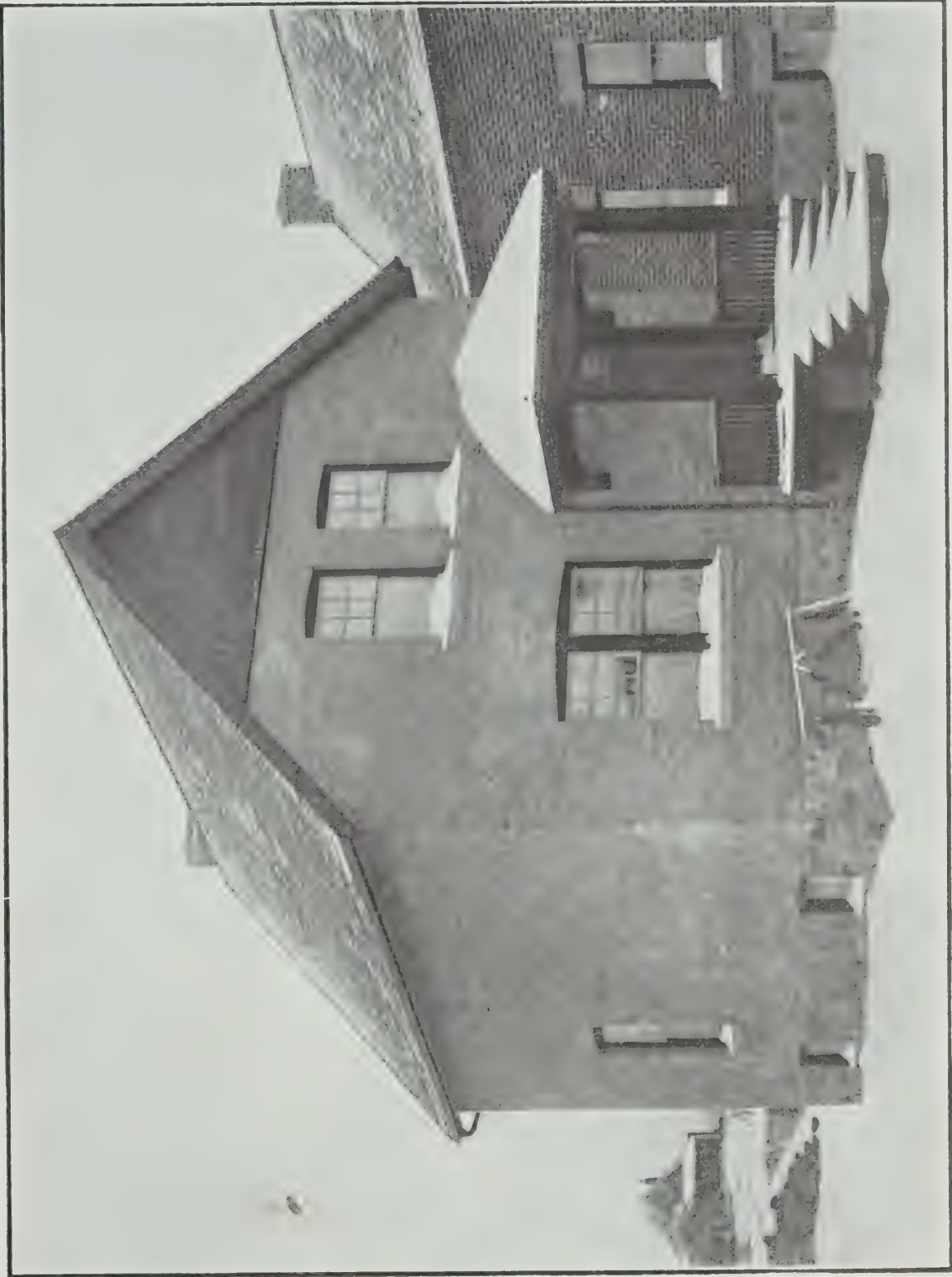
HOUSES ERECTED AT GUELPH BY GUELPH HOUSING COMMISSION.



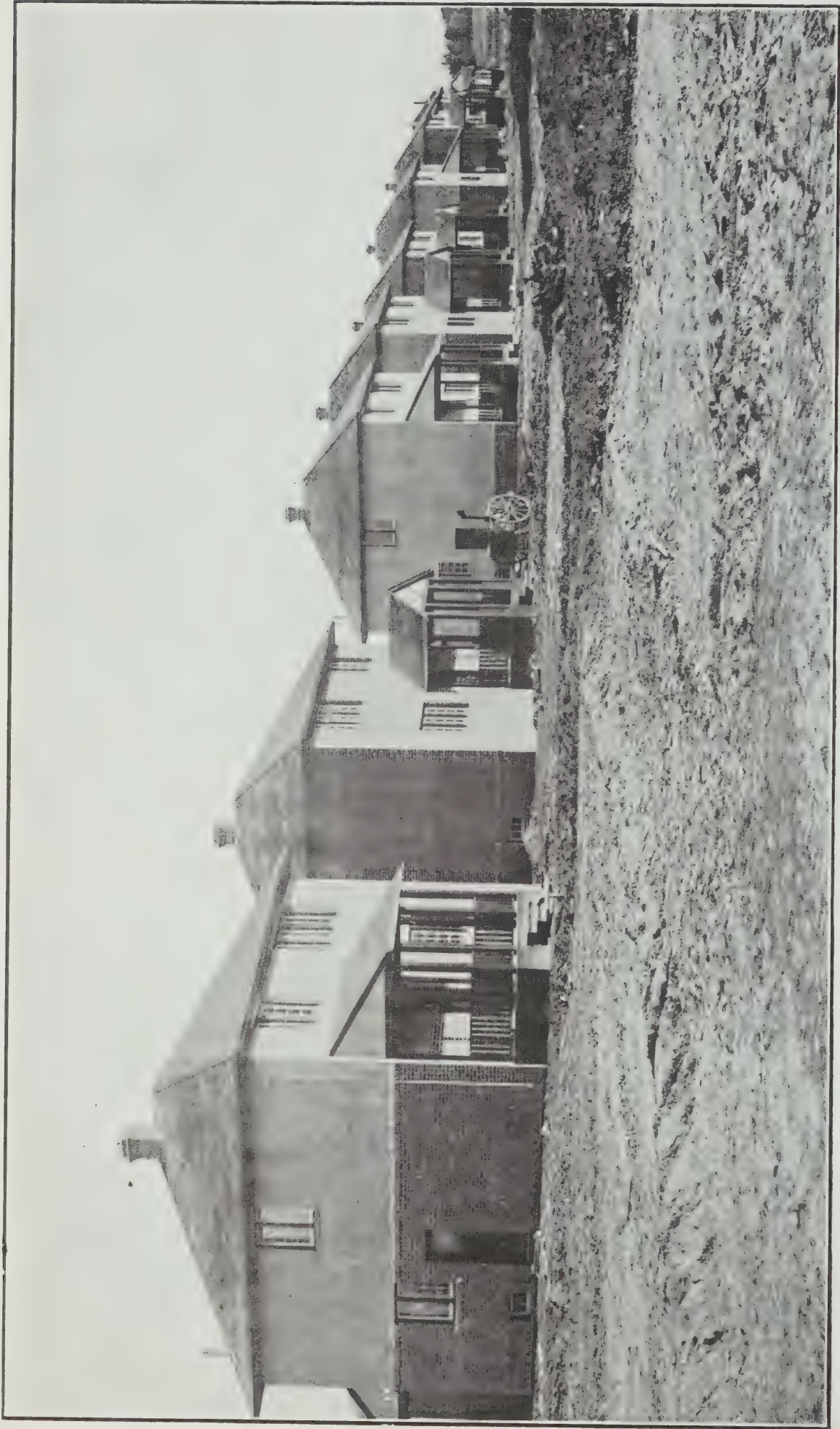
HOUSES ERECTED AT GUELPH BY GUELPH HOUSING COMMISSION.



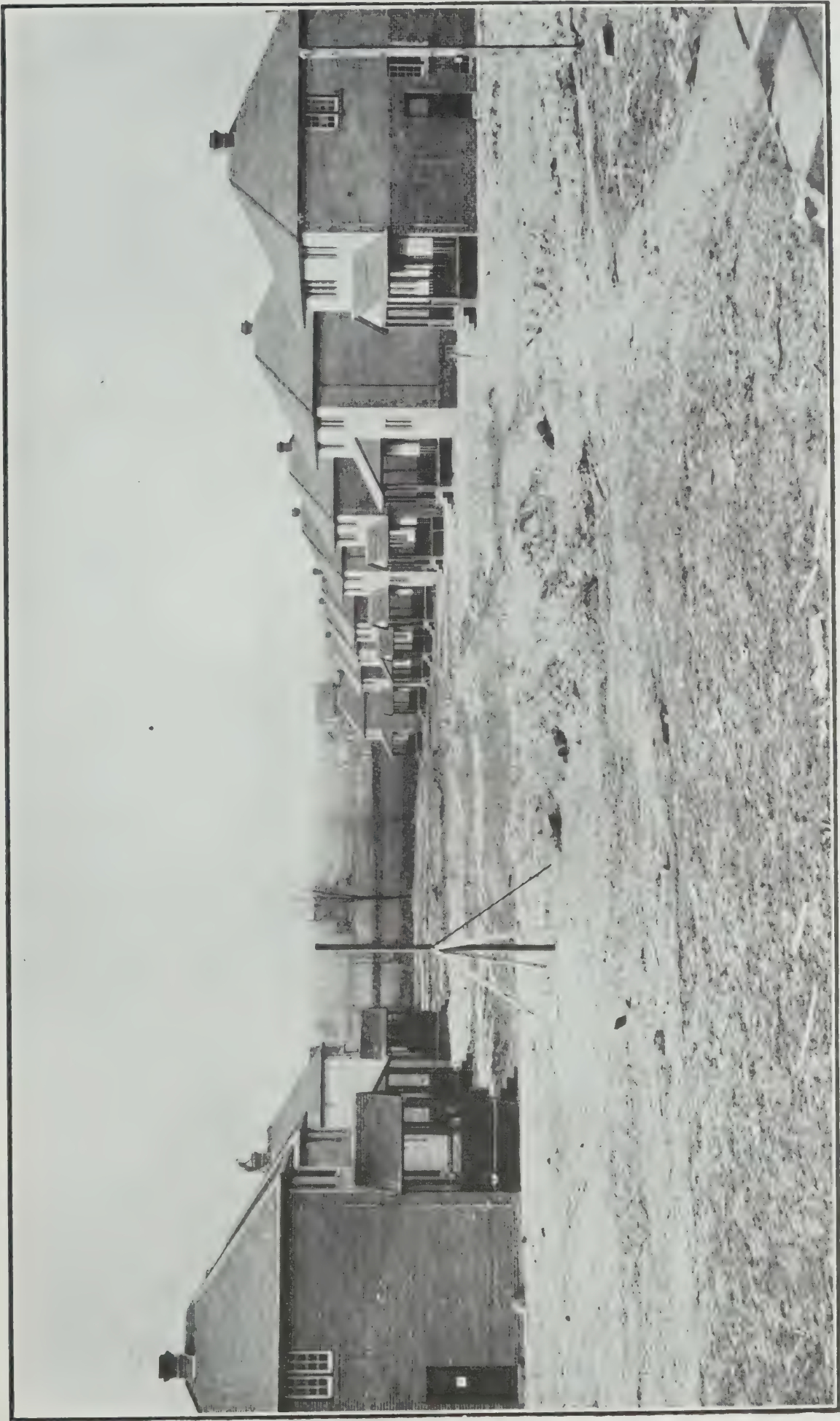
HOUSE ERECTED AT GUELPH BY GUELPH HOUSING COMMISSION.



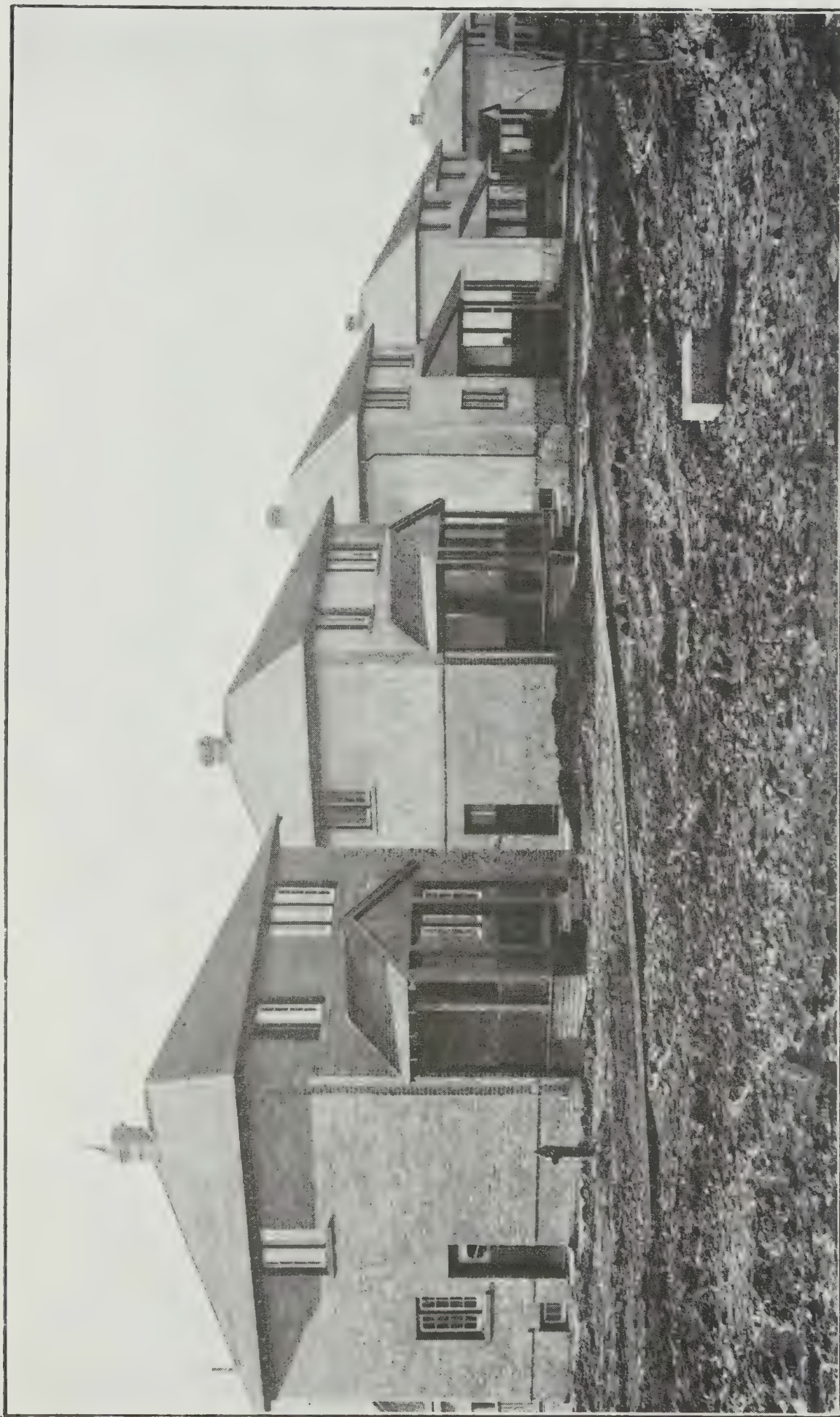
HOUSE ERECTED AT GUELPH BY GUELPH HOUSING COMMISSION.



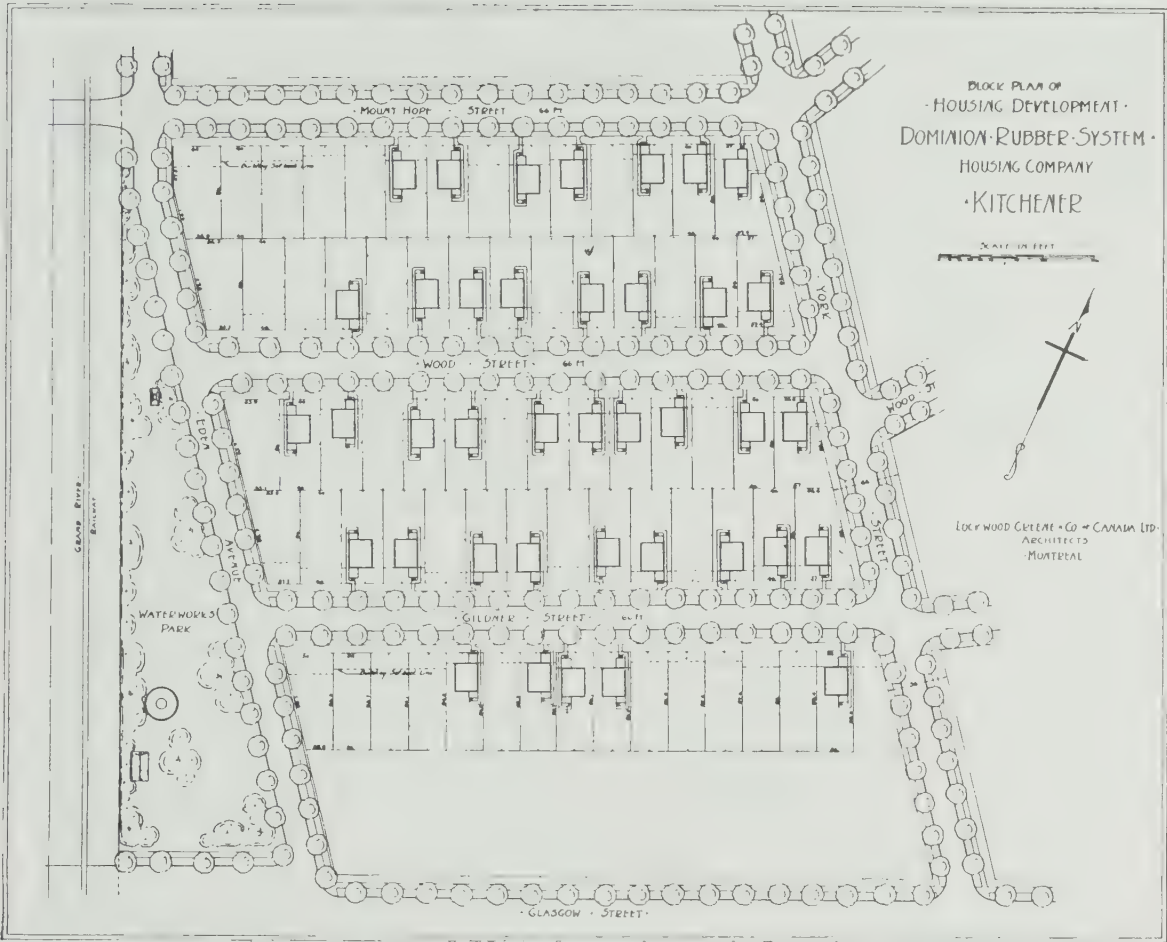
HOUSES ERECTED AT KITCHENER BY THE DOMINION RUBBER SYSTEM HOUSING CO.
(KITCHENER), LTD.
Architects and Engineers, Lockwood, Greene & Co., Ltd.



HOUSES ERECTED AT KITCHENER BY THE DOMINION RUBBER SYSTEM HOUSING Co.
(KITCHENER), LTD.
Architects and Engineers. Lockwood, Greene & Co., Ltd.

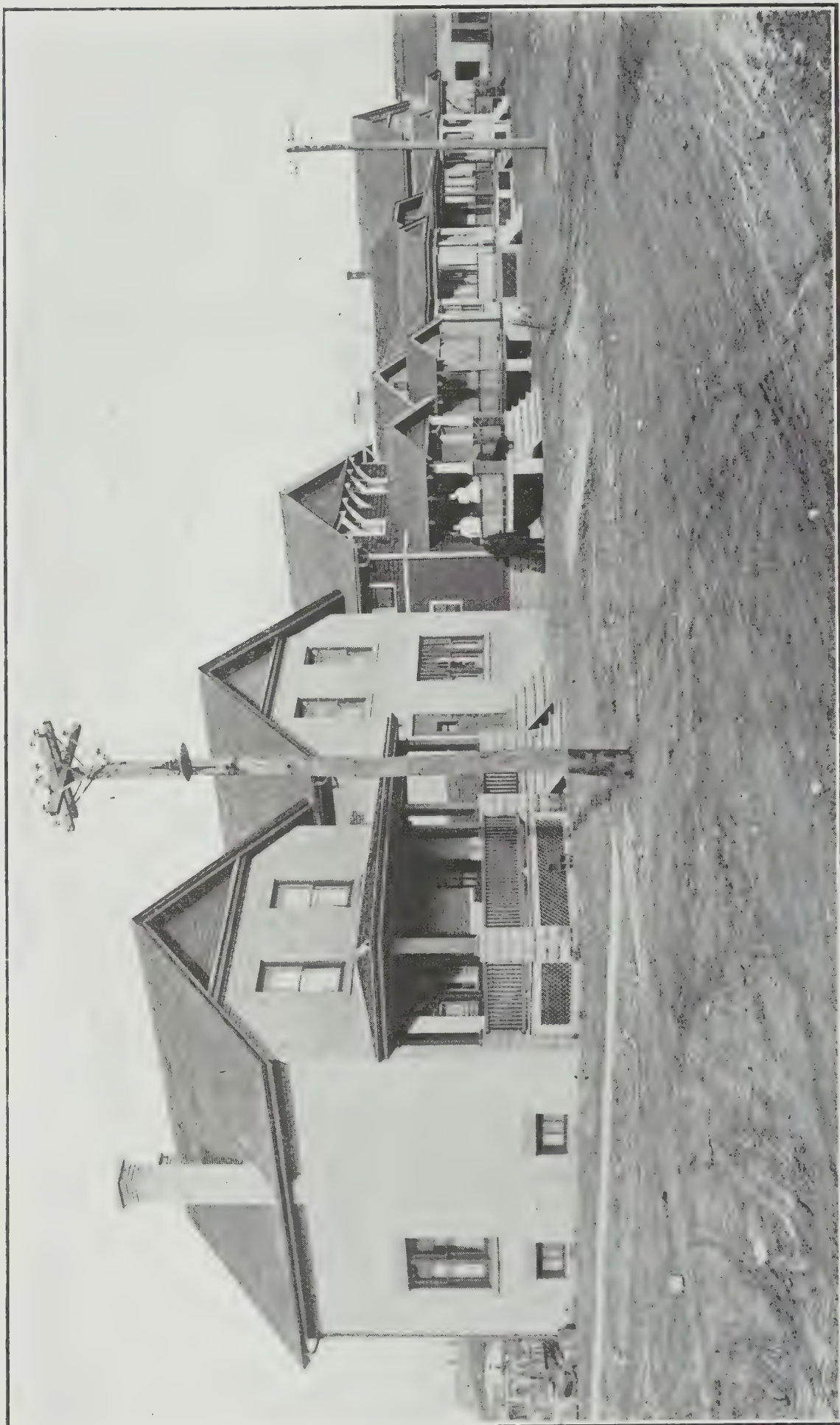


HOUSES ERECTED AT KITCHENER BY THE DOMINION RUBBER SYSTEM HOUSING CO.
(KITCHENER), LTD.
Architects and Engineers, Lockwood, Greene & Co., Ltd.

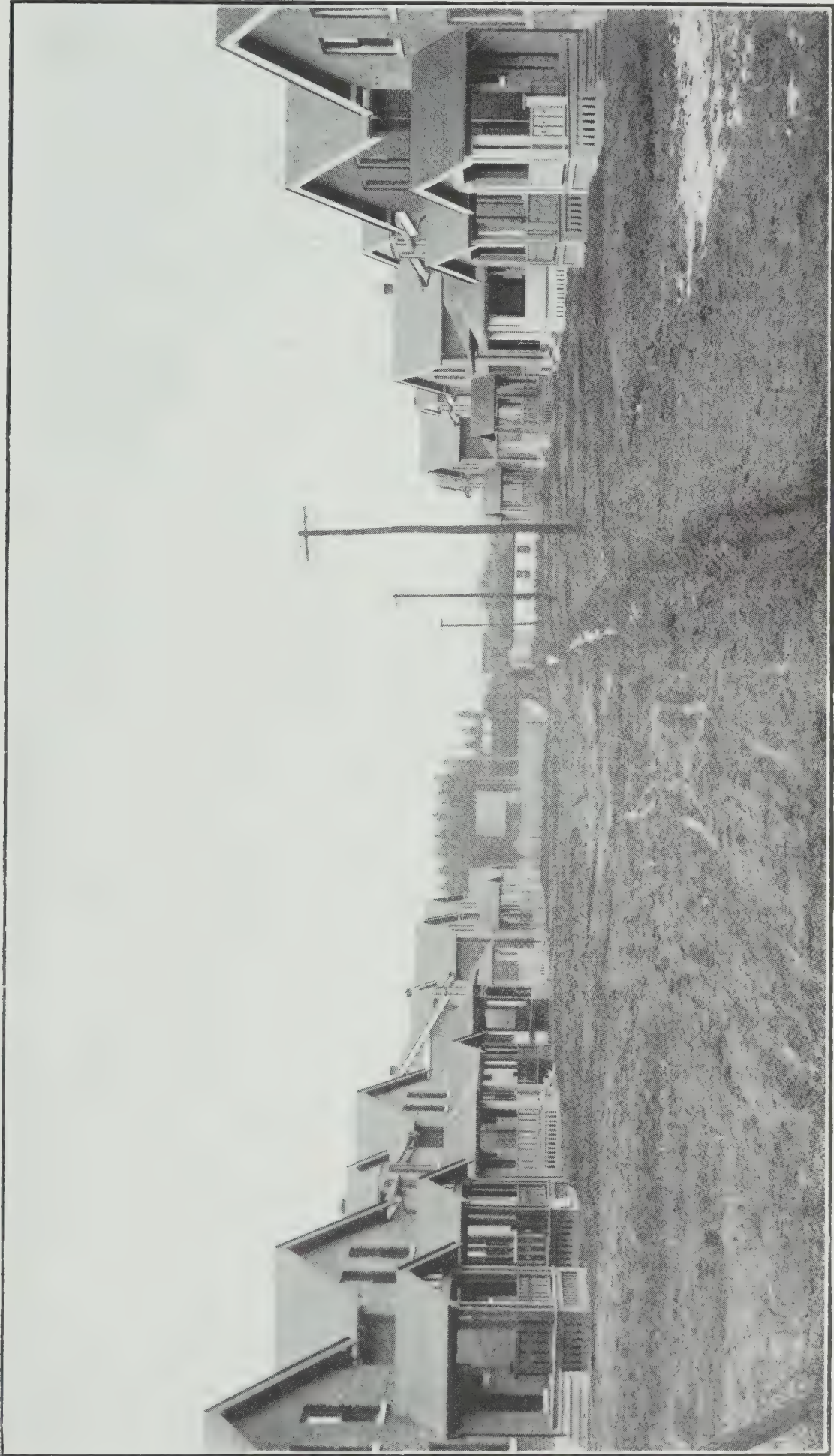


The Housing Company provide in the above plan for the dedication of streets sixty-six feet in width along their frontage. This plan shows a distribution of thirty-nine houses erected under one contract. The houses were placed according to the varied "set back" lines, the deepest set back being at the street intersections.

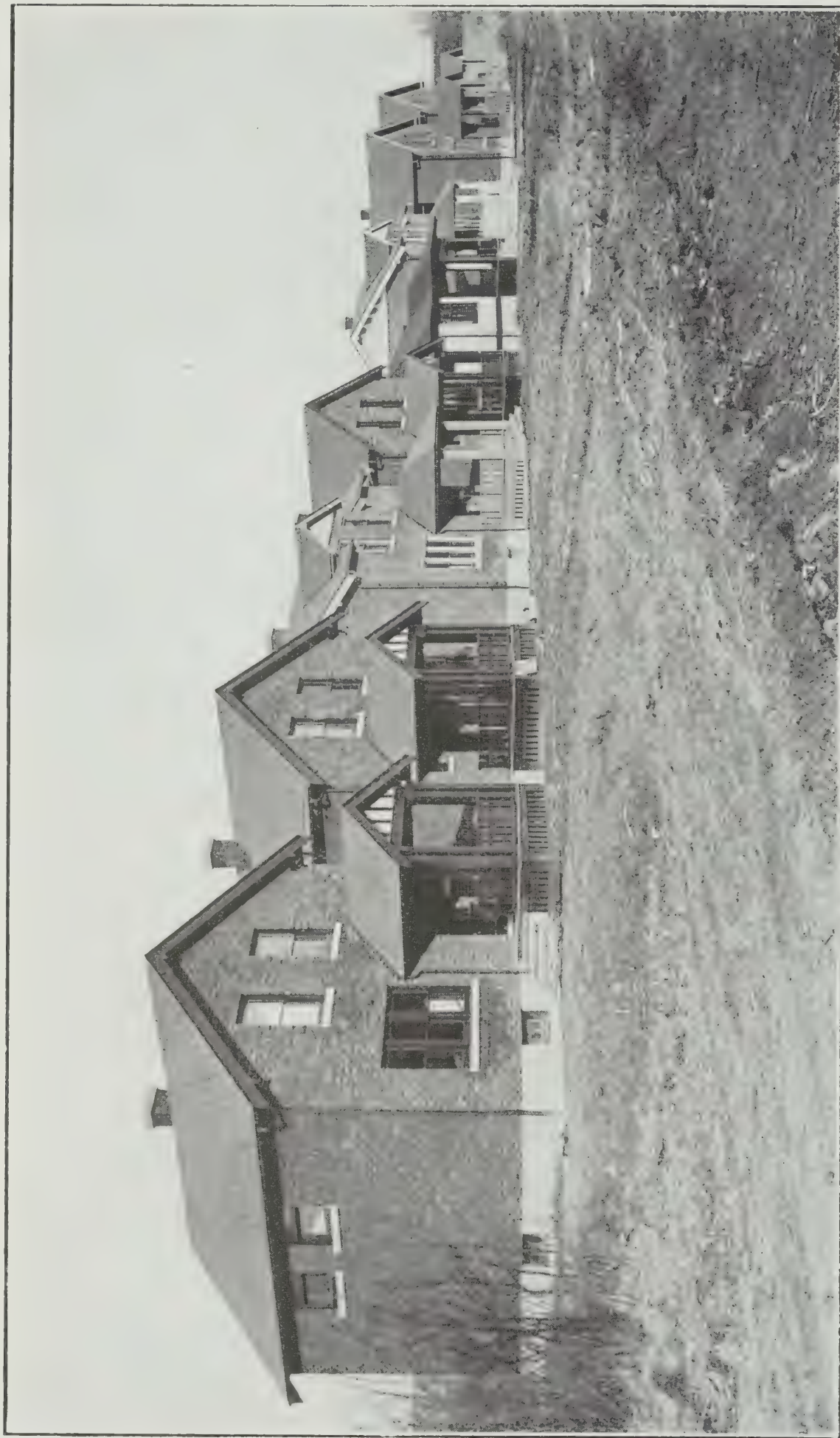
In this arrangement of the houses, intermediate lots were left for the erection, later, of houses of a different type. The use of a variance in materials for the exterior finish, together with the variance obtained by the "set back" lines, allowed in some cases for the allocation of three, and sometimes four, houses on adjoining lots. The Waterworks Park provides for an accessible open space for the development.



HOUSES ERECTED AT LONDON BY LONDON HOUSING COMMISSION.



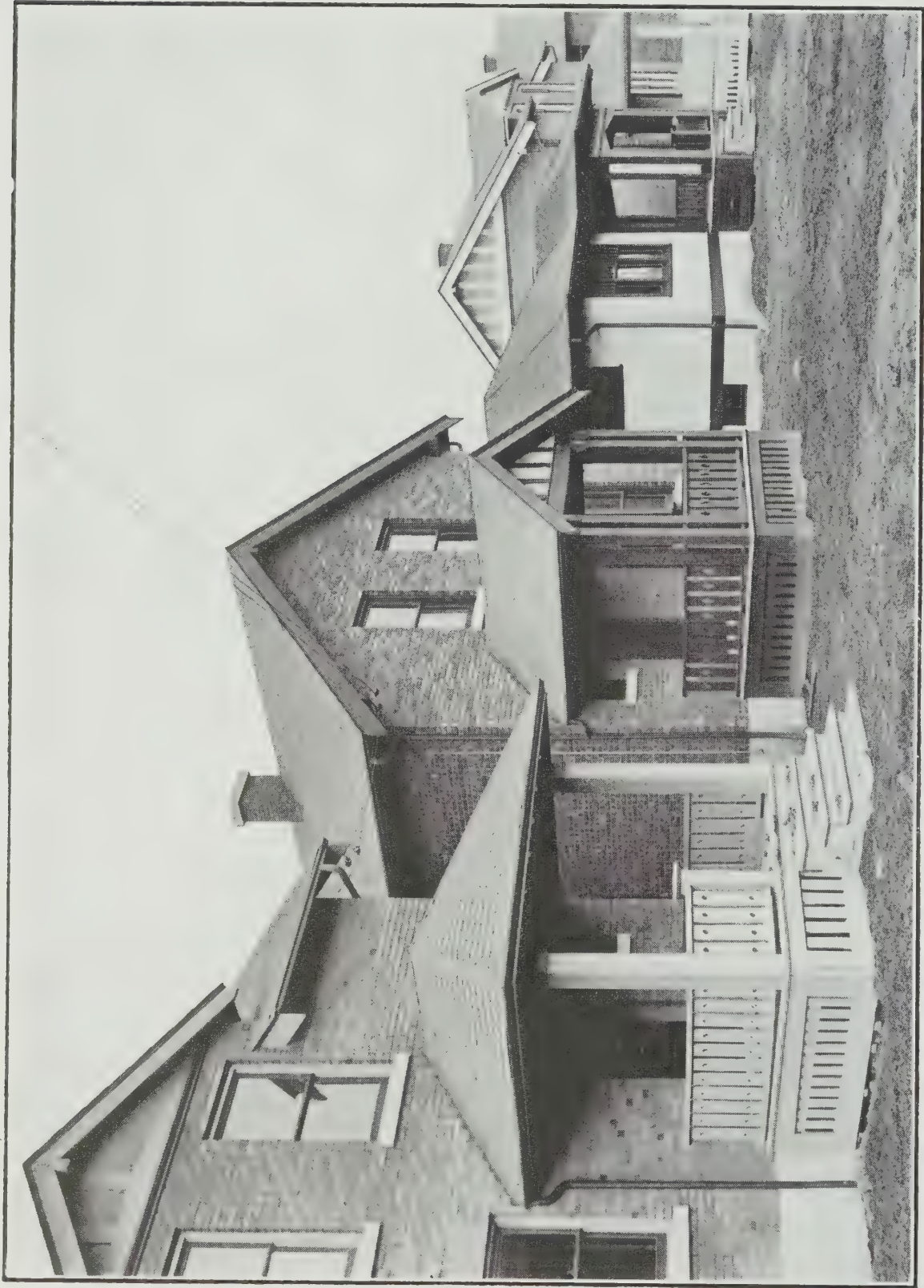
HOUSES ERECTED AT LONDON BY LONDON HOUSING COMMISSION.



HOUSES ERECTED AT LONDON BY LONDON HOUSING COMMISSION.



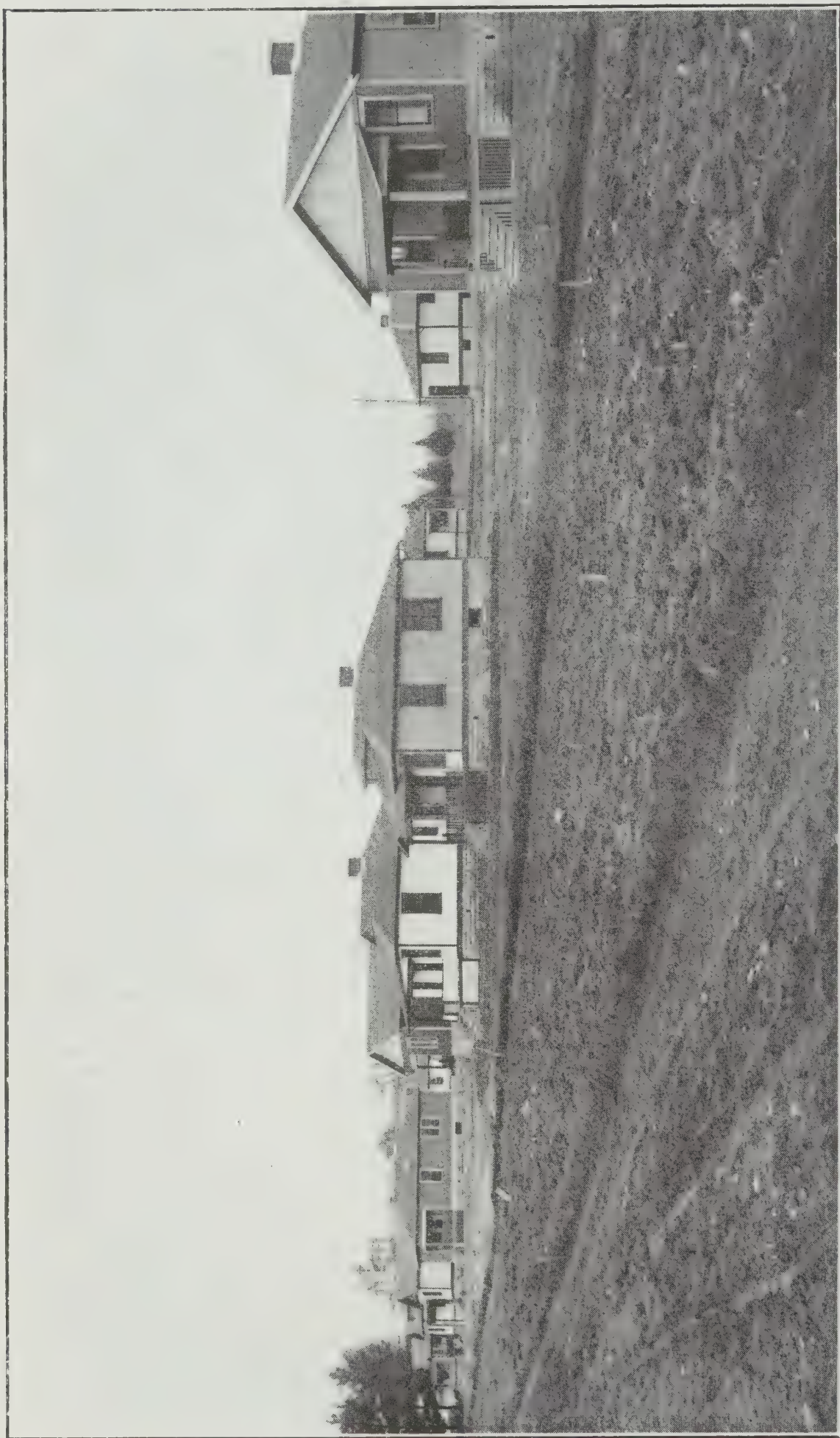
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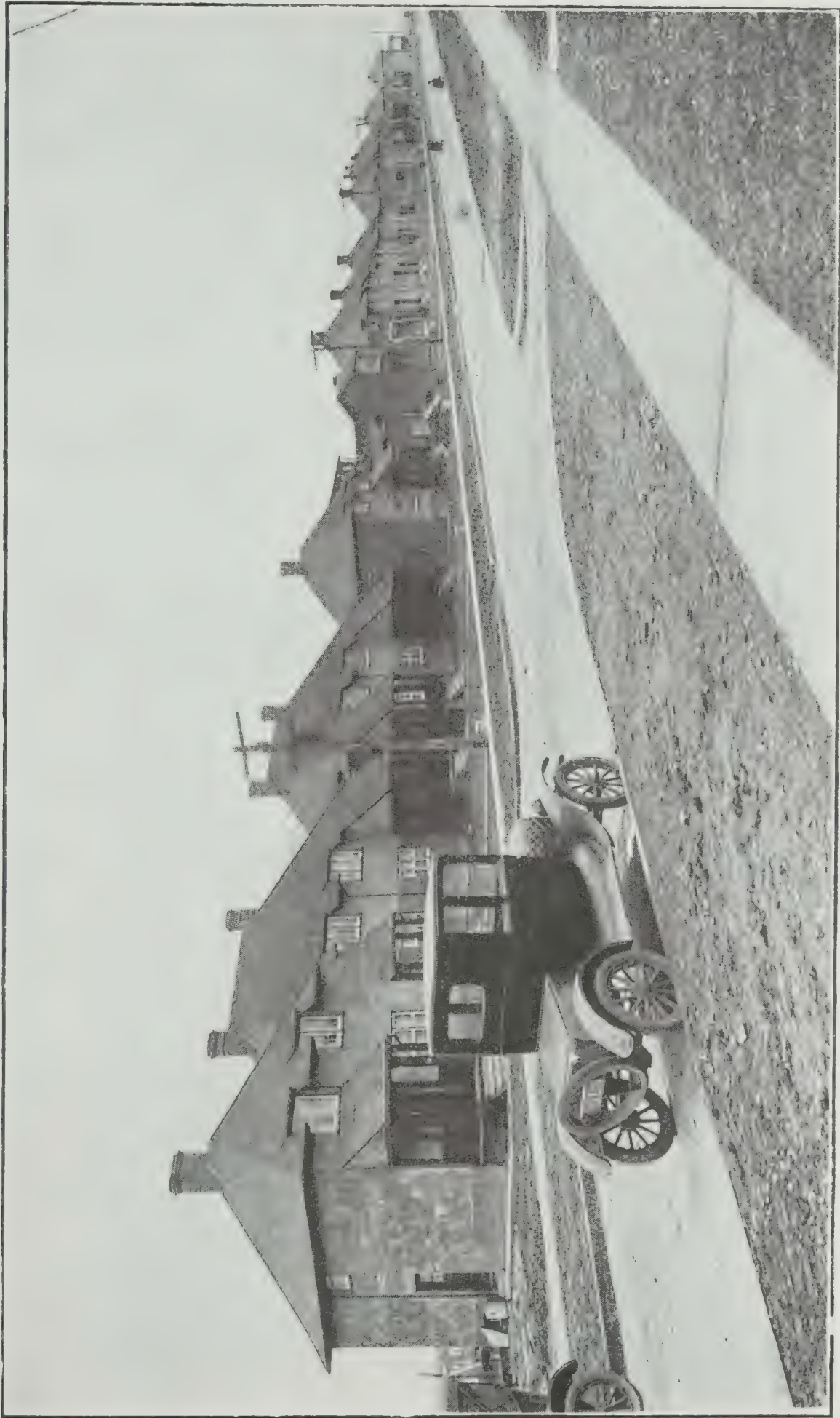
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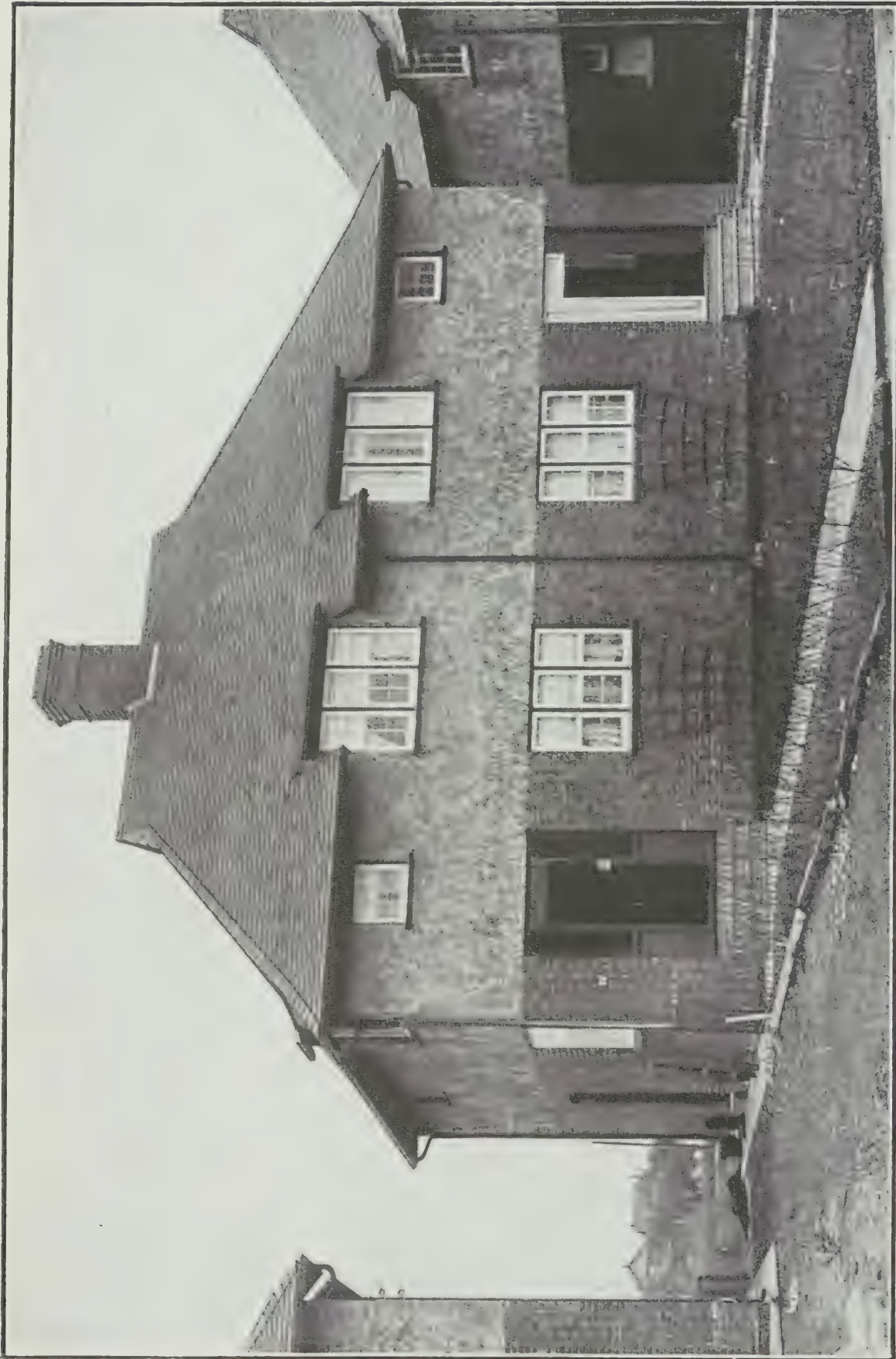
HOUSES ERECTED AT LONDON BY LONDON HOUSING COMMISSION.



HOUSES ERECTED AT LONDON BY LONDON HOUSING COMMISSION.



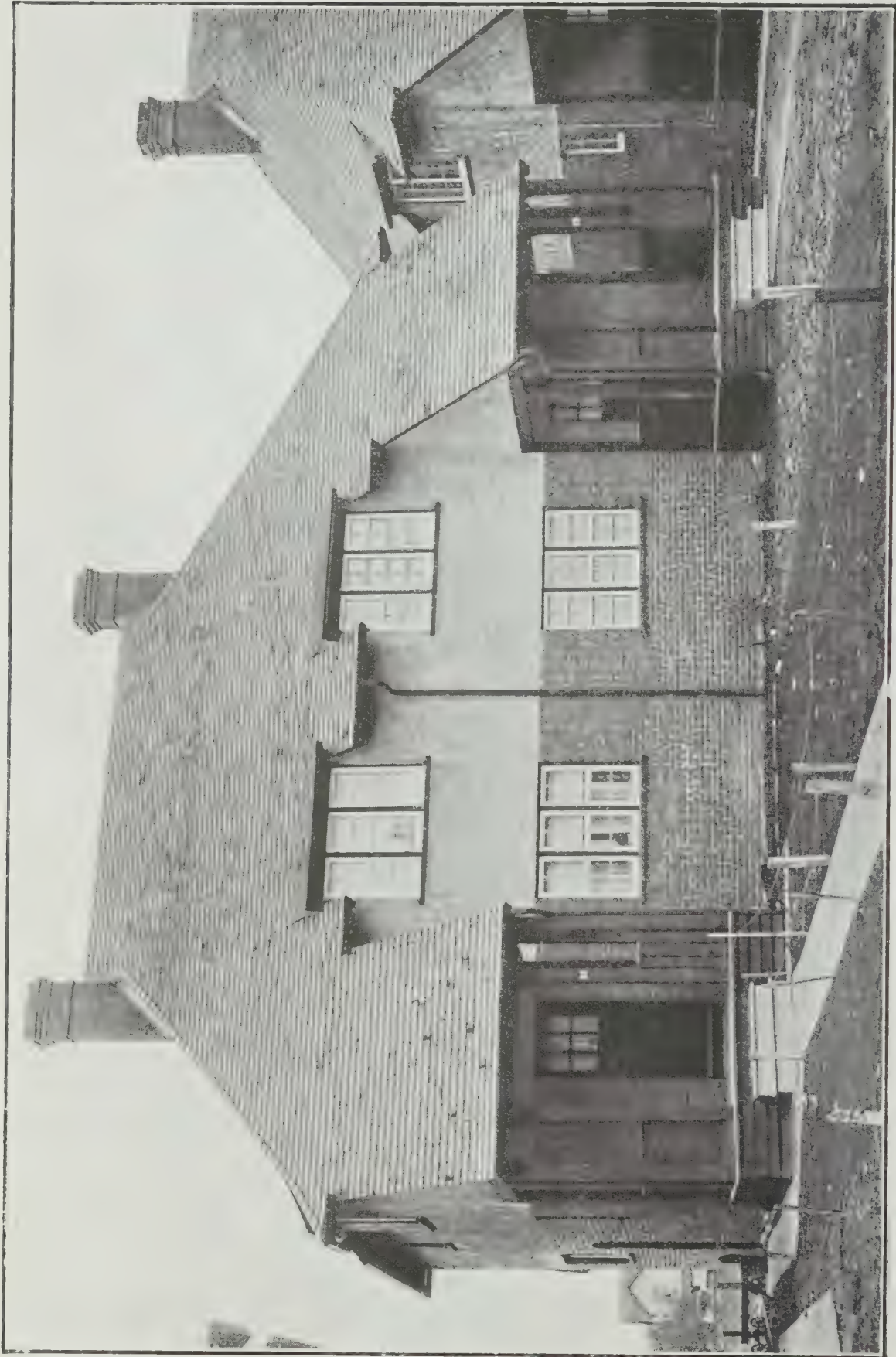
HOUSES ERECTED AT NEW TORONTO BY NEW TORONTO HOUSING COMMISSION.
Architects and Engineers, James, Loudon & Hertzberg.



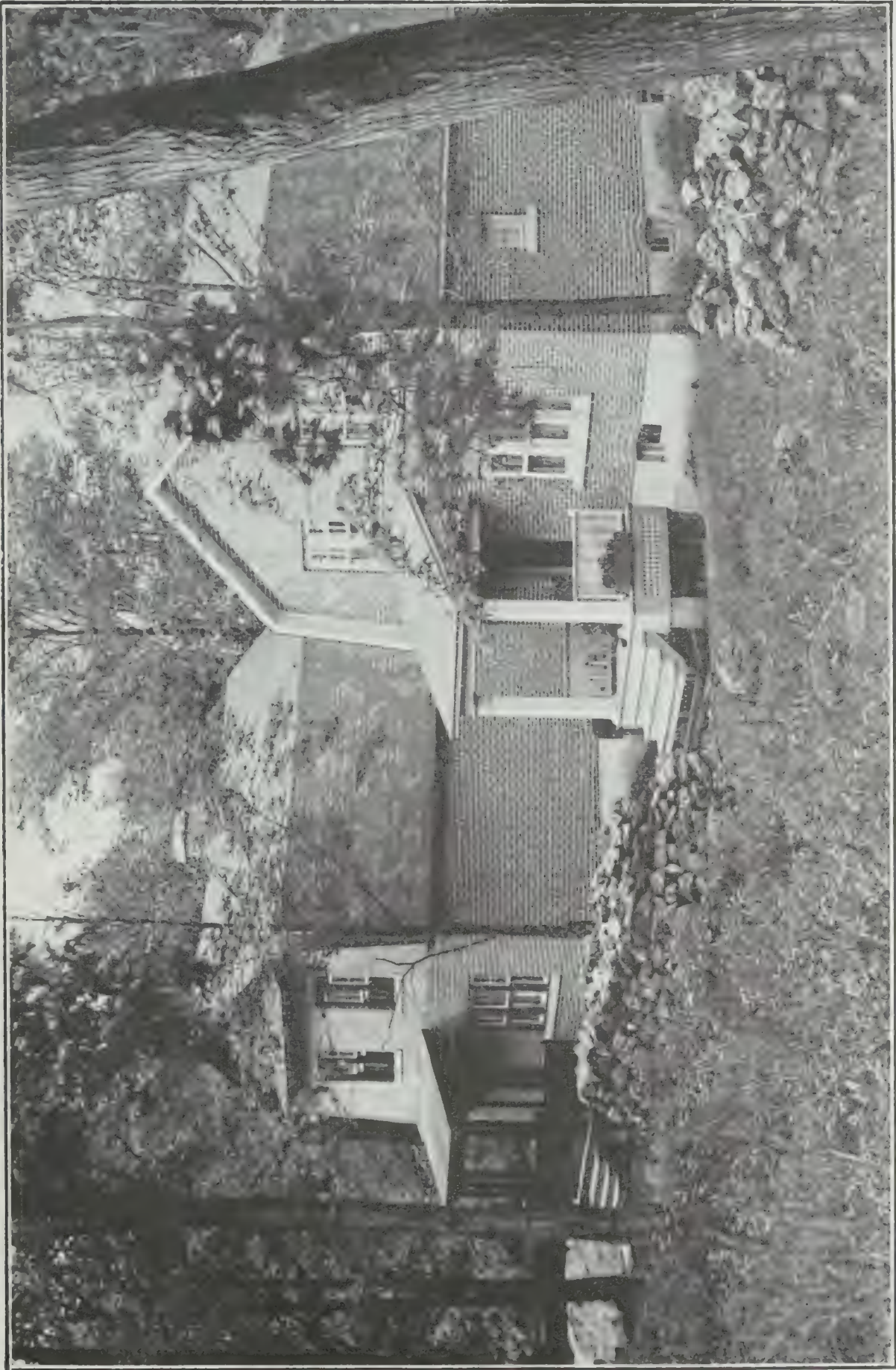
HOUSES ERECTED AT NEW TORONTO BY NEW TORONTO HOUSING COMMISSION.
Architects and Engineers, James, Loudon & Hertzberg.



HOUSES ERECTED AT NEW TORONTO BY NEW TORONTO HOUSING COMMISSION.
Architects and Engineers, James, Loudon & Hertzberg.



HOUSES ERECTED AT NEW TORONTO BY NEW TORONTO HOUSING COMMISSION,
Architects and Engineers, James, London & Hertzberg,



HOUSES ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.

Cost, left to right:—

\$4,200.....Seven rooms, solid brick.

\$4,000.....Six rooms, solid brick.

F. E. Betty, Esq., Architect.

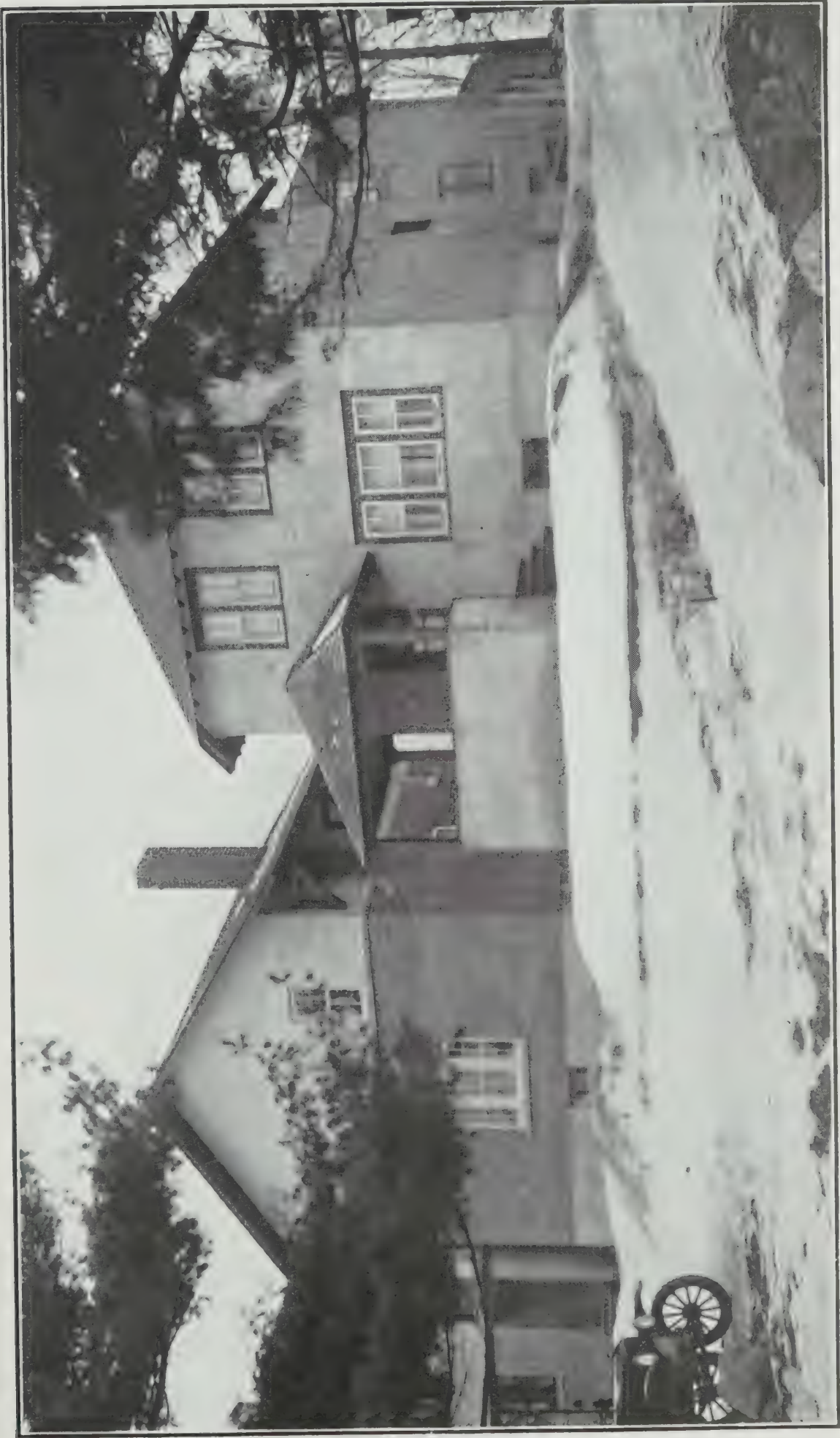


HOUSES ERRECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.
Cost, left to right:—

\$4,200 Six rooms, solid brick.

\$4,500 Seven rooms, solid brick.

F. E. Bellry, Esq., Architect.



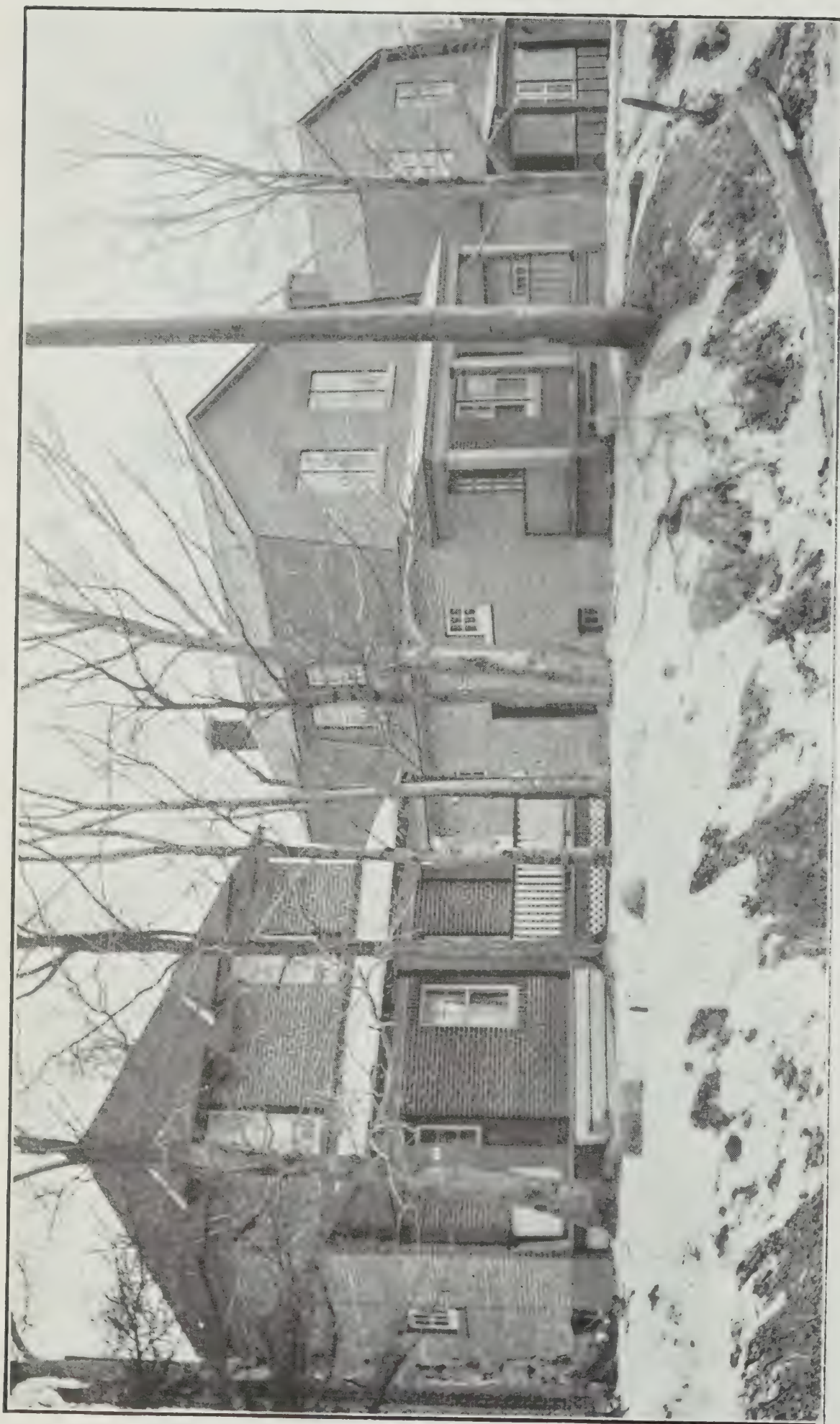
HOUSES ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.

Cost, left to right:

\$4,800 . . . Six rooms, solid brick.

\$3,150 . . . Six rooms, frame.

R. E. Belfry, Esq., Architect.

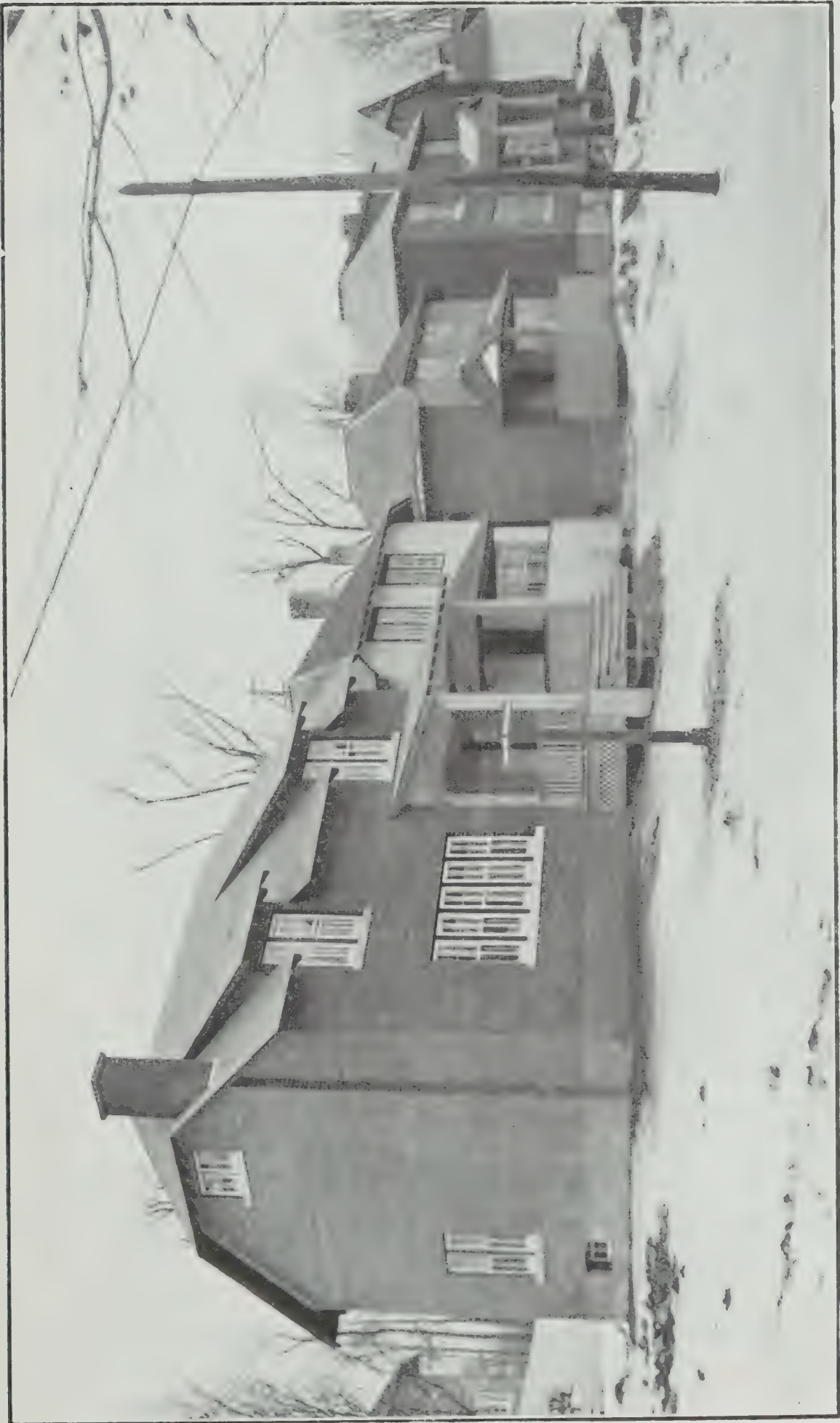


HOUSES ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.

Cost, left to right:—

\$4,300	Six rooms, solid brick.
\$4,200	Seven rooms, solid brick.
\$4,000	Six rooms, solid brick.

F. E. Belfry, Esq., Architect.

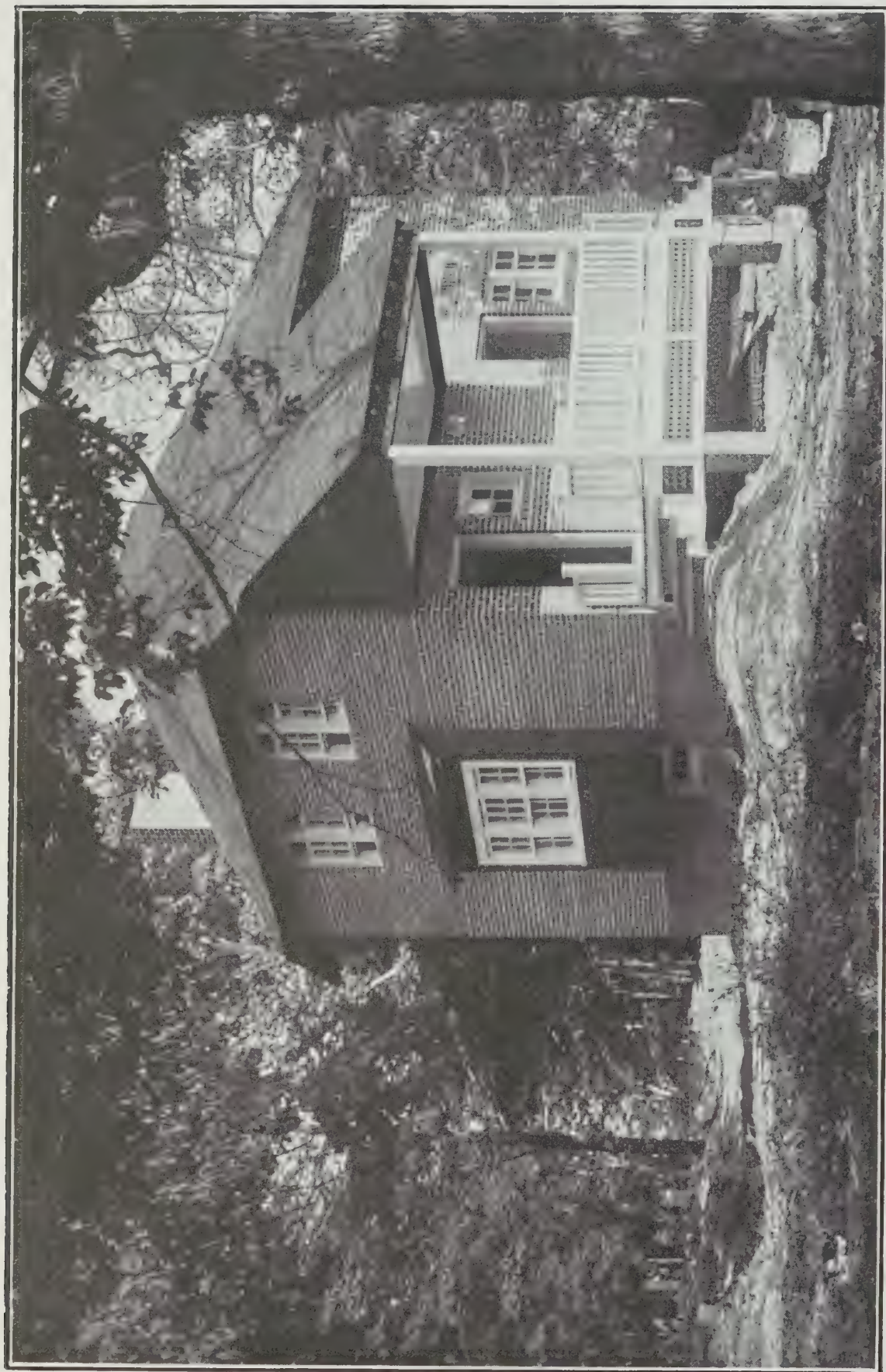


HOUSES ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.

Cost, left to right:—

- \$5,000. Seven rooms, solid brick.
- \$3,200. Six rooms, frame.
- \$3,200. Six rooms, frame.
- \$5,000. Seven rooms, solid brick.

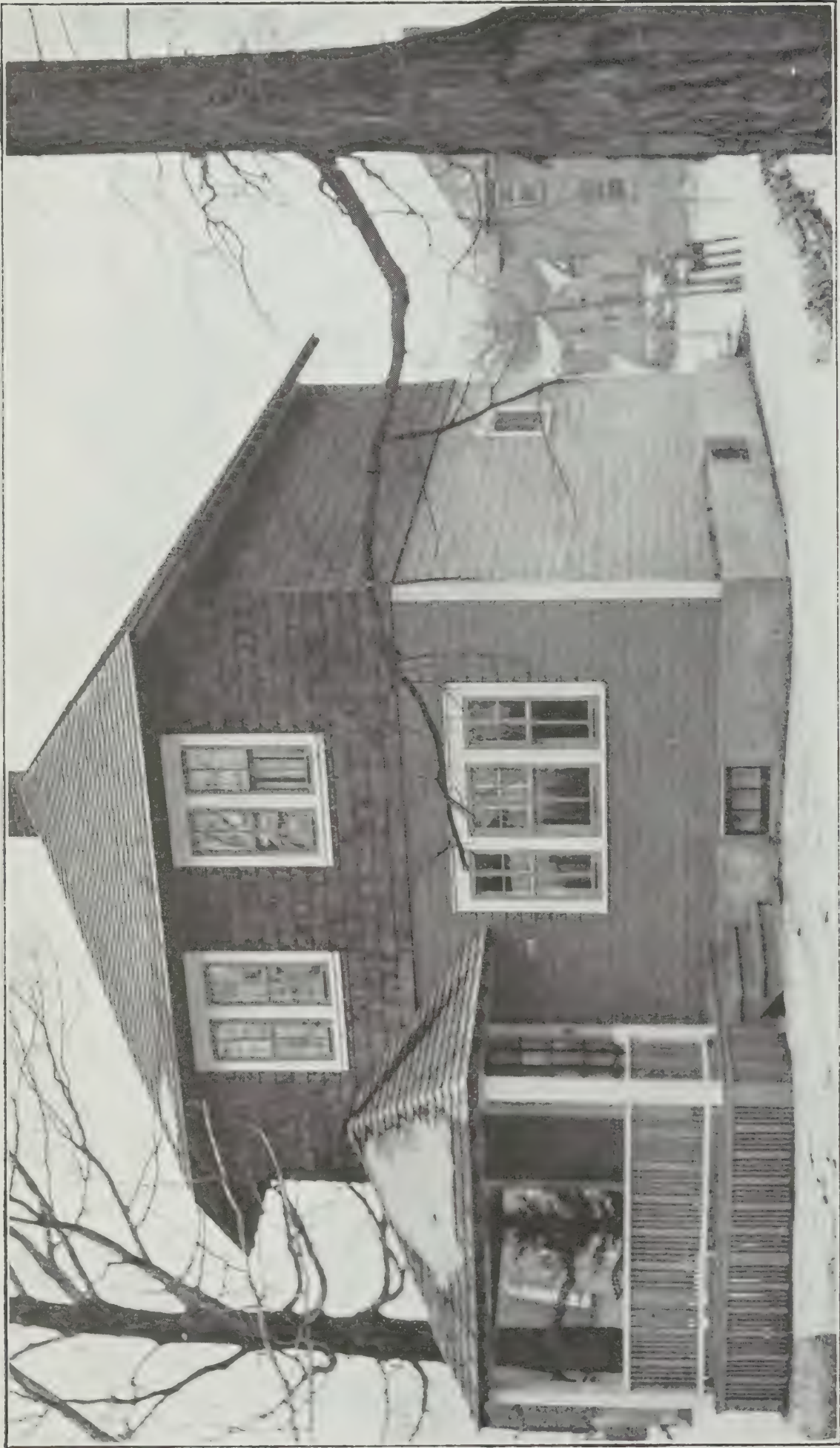
F. E. Belfry, Esq., Architect.



HOUSE ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.
Cost, \$4,800....Six rooms, solid brick.
F. E. Belfry, Esq., Architect.



HOUSE ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.
\$4,200....Six rooms, solid brick.
F. E. Belfry, Esq., Architect.



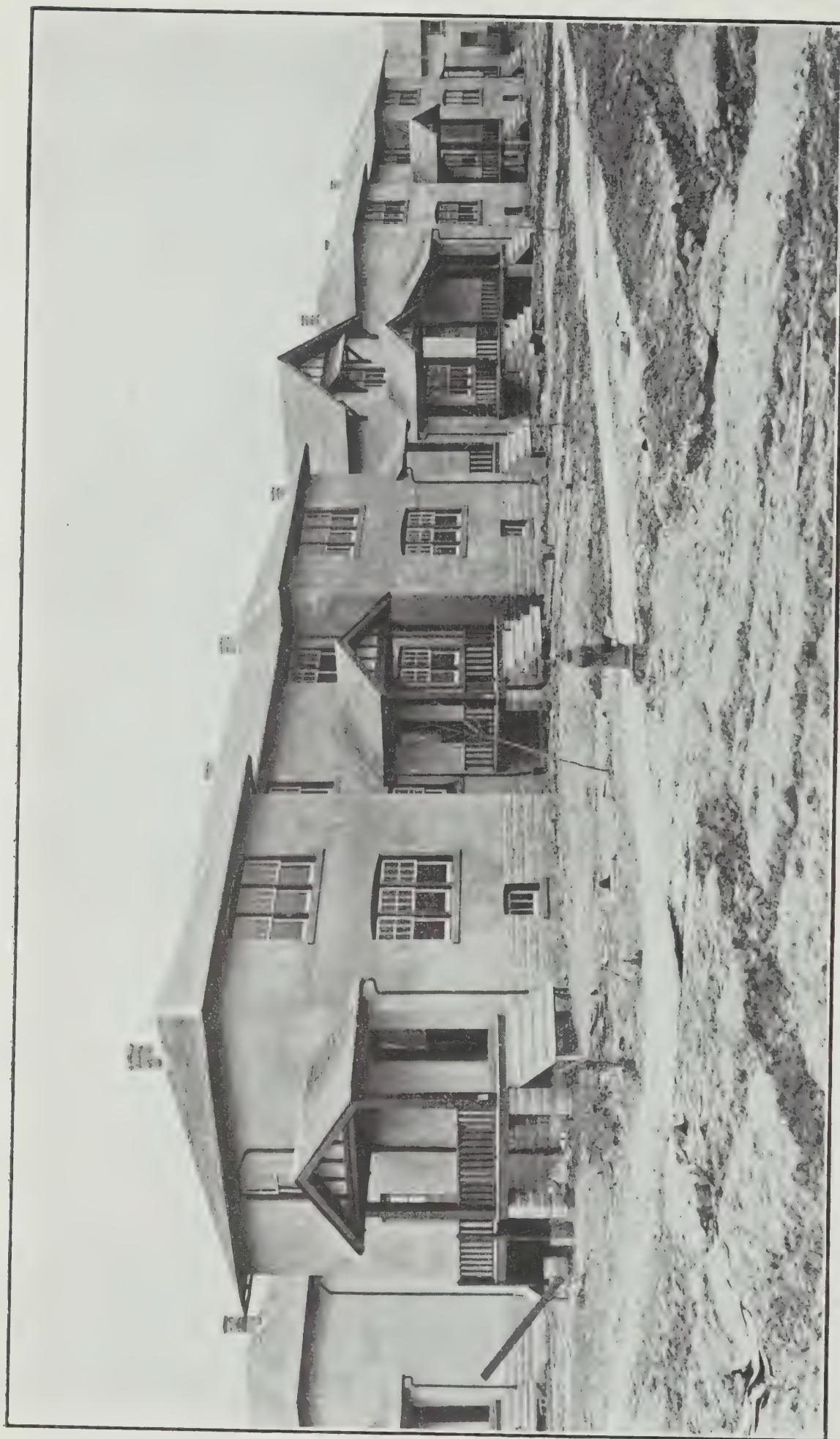
HOUSE ERECTED ON LINDENLEA DEVELOPMENT BY OTTAWA HOUSING COMMISSION.

Cost, \$3,150....Six rooms, frame.

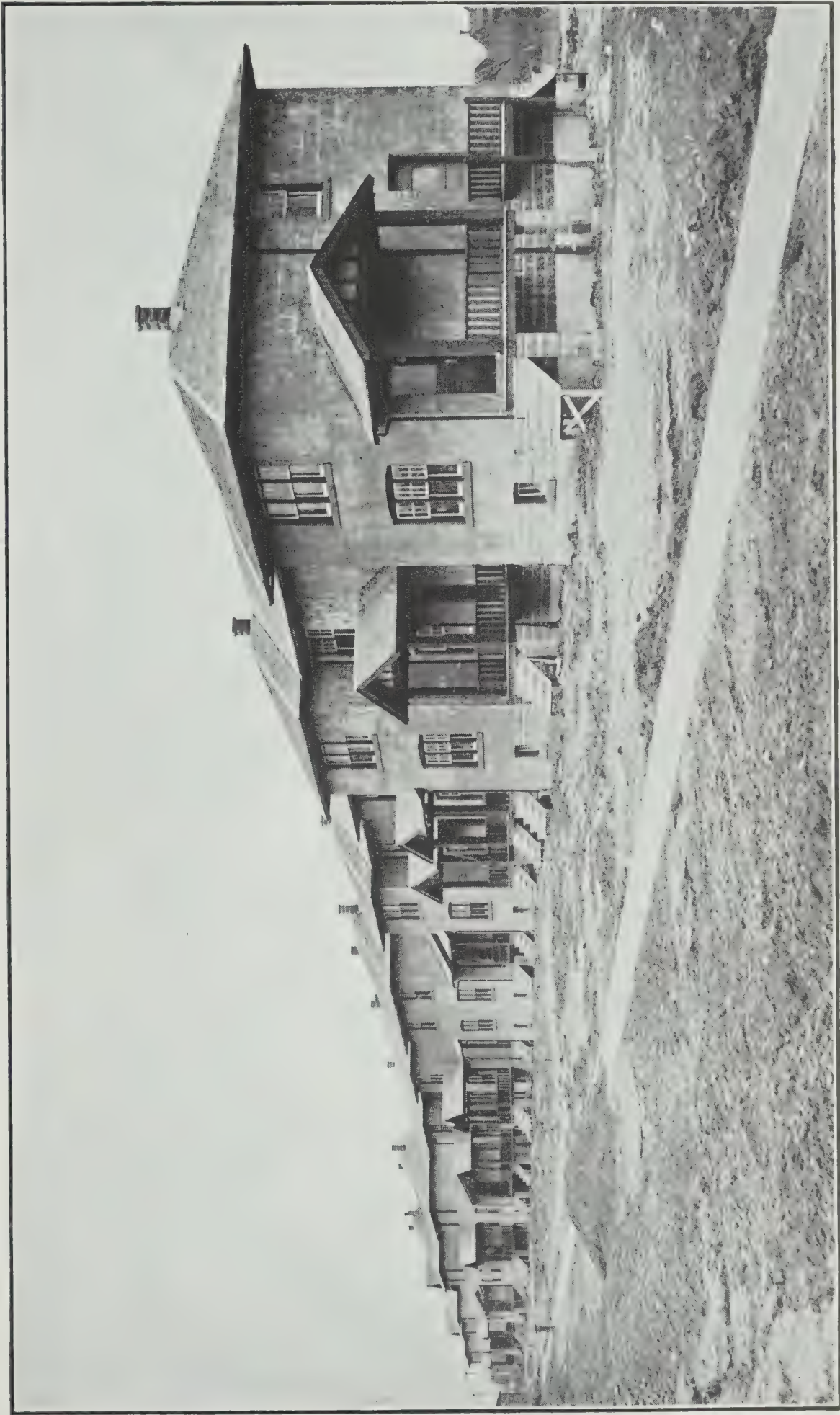
F. E. Bellamy, Esq., Architect.

The above shows the re-subdivision of a level property previously a part of a Gridiron layout. While the new layout was restricted as to the depth and shape of the lots by this fact, provision was made for an equalized distribution of open spaces, the screening of an adjoining factory, and for the attractive treatment of its straight streets by establishing "set back" lines.

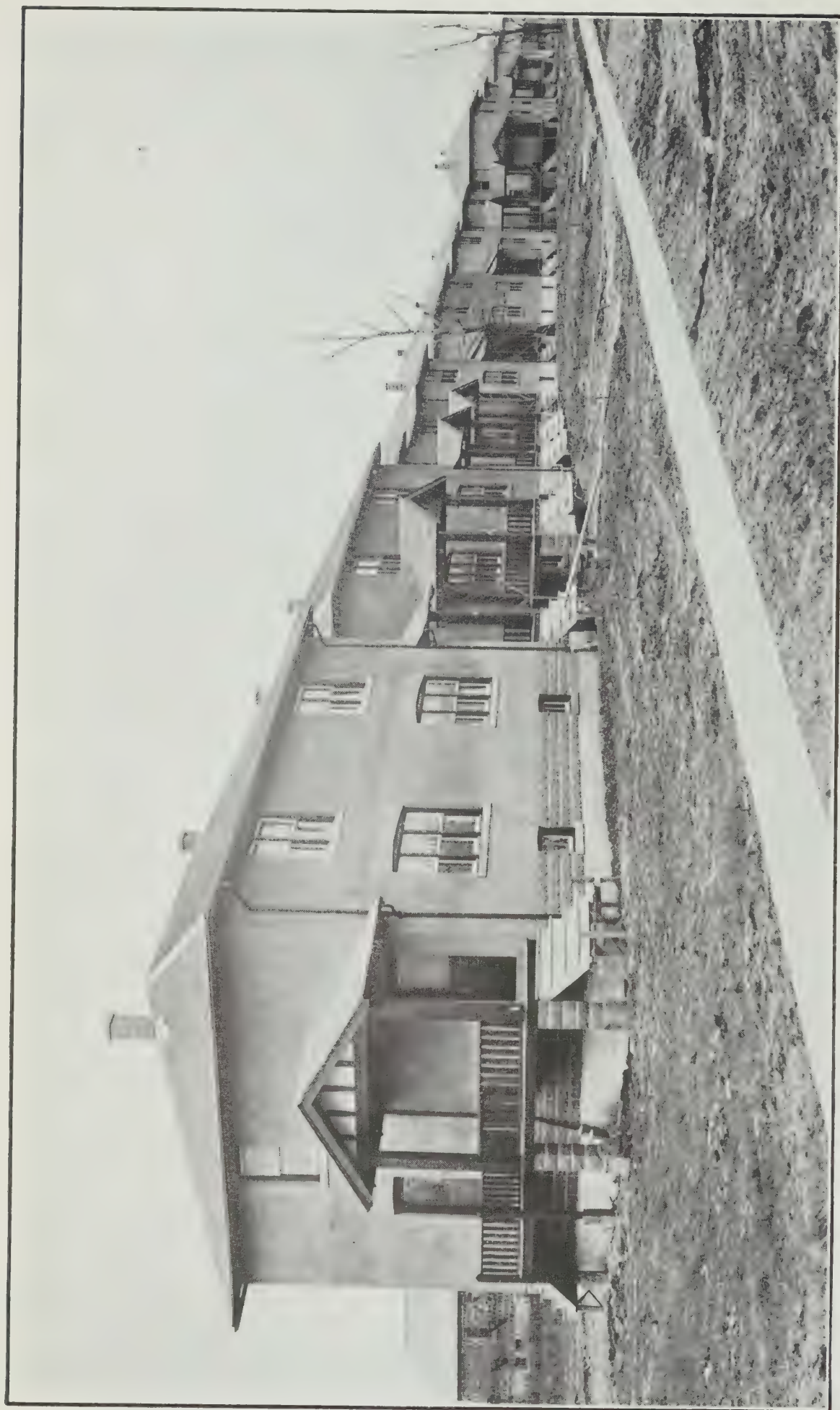
The houses placed with regard to these varied distances from the curb, will give the effect of courts along the street,



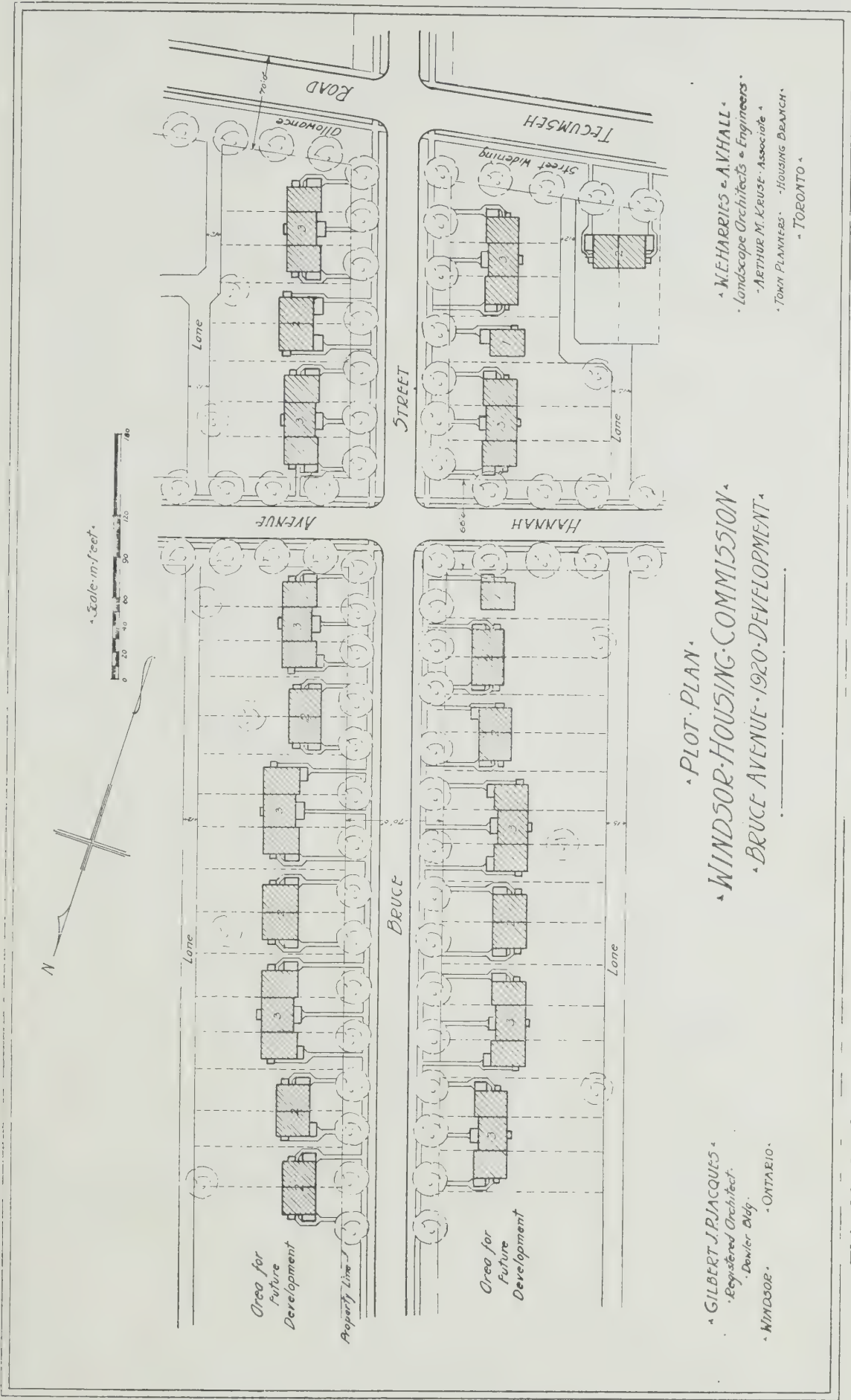
HOUSES ERRECTED AT WINDSOR BY WINDSOR HOUSING COMMISSION.
Architect, Gilbert J. P. Jacques, Esq.



HOUSES ERECTED AT WINDSOR BY WINDSOR HOUSING COMMISSION.
Architect, Gilbert J. P. Jacques, Esq.



HOUSES ERECTED AT WINDSOR BY WINDSOR HOUSING COMMISSION.
Architect, Gilbert J. P. Jacques, Esq.



This block plan shows a re-subdivision of four blocks of property fronting on a street previously laid down in a large subdivision, running from an arterial highway. The resulting establishment of generous lot depths and lanes permitted the use of the "Three Unit" type of house. This plan illustrates the application of "set back" lines, and a court formed in a straight street by the use of them. The porches of the houses are so placed as to obtain views across the court, and still not obstruct the view from the others. As the widening of Tecumseh Road seemed a consideration of the near future, the plan locates the adjoining houses in a manner to provide generously for this.

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BUREAU OF MUNICIPAL AFFAIRS

Report of

Municipal Water Works and Gas Systems

for 1919

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

Printed and Published by A. T. WILGRESS, Printer to the King's Most Excellent Majesty

1920

Printed by
THE RYERSON PRESS.

To His Honour LIONEL HERBERT CLARKE, ESQUIRE,
Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to present to you the report of the Bureau of Municipal Affairs for the year 1920 with reference to the Municipal Systems of Water Works and Gas Works.

H. C. NIXON,
Provincial Secretary.

PARLIAMENT, BUILDINGS,
Toronto, January, 1921.

PARLIAMENT BUILDINGS,
Toronto, January, 1921.

TO THE HONOURABLE H. C. NIXON, M.P.P.,
Provincial Secretary of the Province of Ontario.

SIR,—I have the honour to present to you the report of the Bureau of Municipal Affairs for the year 1920, with reference to the Municipal Systems of Water Works and Gas Works.

I have the honour to be, Sir,

Your obedient servant,

J. A. ELLIS. *Director.*

MUNICIPAL WATER WORKS.

Statement Compiled from Municipal Returns for the Year Ending 31st December, 1919.

	Popula- tion	Year of Instal- ation	Gallons of Water Consumed in Year	Earnings	Operating Expenses	Total Assets	Liabilities	Net Profit	Net Loss	Average daily consumption per head in gallons
Acton	.....	1920	.....	.....	\$107 11	.....	.....	.....	.....	.....
Alexandria	2,400	1895	.....	\$6,680 00	6,887 00	\$15,000 00	\$15,107 86	.....	\$207 00	.....
Alliston	1,264	1892 1912	32,850,000	3,139 49	2,626 44	24,343 85	.....	.....	.....	71
Amherstburg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arnprior	4,200	1901	273,750,000	12,092 89	11,673 91	102,786 99	27,654 18	.....	.....	178½
Aylmer	2,247	1901	.....	8,995 09	4,749 36	85,006 02	50,256 13	.....	.....	.....
Aurora	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barrie	6,786	1890	.....	16,989 07	10,170 95	145,643 89	56,374 05	\$285 78	.....	.....
Beamsville	1,164	1895	.....	2,500 22	3,978 37	35,862 22	5,851 84	.....	.....	.....
Belleville	12,000	1888	650,000,000	35,975 75	30,540 01	317,921 38	168,221 00	5,435 74	.....	133
Beeton	628	1893	.....	1,965 00	1,250 20	20,995 00	5,010 00	735 00	.....	.....
Bracebridge	2,303	1895	36,000,000	5,154 55	2,335 00	72,769 28	39,564 07	680 03	.....	44
Brampton	4,328	1881 1912	147,726,000	15,968 33	5,283 74	168,660 88	53,112 29	3,656 59	.....	93.5
Brantford	33,000	1888 1889	10,017,756,852	110,885 15	66,608 82	1,172,514 55	826,377 06	42,629 57	.....	83.2
Bridgeburg	2,195	1903	8,400,000	6,472 31	6,809 61	41,557 41	28,211 32	.....	337 30	.....
Brockville	9,500	1892	917,581,429	39,821 67	30,981 62	465,106 40	371,294 25	.....	4,931 58	195
Carleton Place	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chatham	15,030	1894	406,000,000	40,801 02	24,652 59	160,334 14	132,979 39	.....	.....	75
Cobalt	5,036	1910	281,218,000	18,947 65	15,830 49	152,782 03	10,212 41	3,117 16	.....	148
Cochrane	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coldwater	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collingwood	7,300	1889 to 1902	235,867,000	16,324 20	13,851 72	119,316 11	100,374 18	.....	.....	89
Cornwall	7,000	1887	600,000,000	25,133 30	7,465 03	191,621 02	104,550 17	6,432 70	.....	.....
Chapleau	2,600	1909 1910	100,000,000	10,064 10	7,444 78	63,158 95	53,202 74	.....	1,311 86	.....
Creemore	615	1904	.....	1,069 85	.....	21,925 00	21,259 18	.....	.....	.....
Crowland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deseronto	2,017	1906	.....	6,048 70	4,171 98	73,441 91	24,840 91	1,880 57	.....	.....

Dundas	5,009	1884	35,403,012	9,591 51	5,712 86	168,856 90	114,425 99	5,188 32	19.4
Dunnville	1,413	1911		694 11	3,860 58	16,911 90	13,539 98		
Dresden	2,300	1912		3,974 20	1,030 48	36,978 86	27,180 21	1,598 84	40
Elmira		1908	16,000,000						
Englehart									
Essex	1,435	1910	30,400,000	4,247 58	3,147 58	30,500 00	17,860 33	230 00	58
Exeter	3,400	1907		11,629 59	4,770 59	104,538 65	73,443 50		1,458 32
Fort Frances		1908	110,000,000						90 to 100
Fort William	19,000	1906		105,610 43	25,368 70			6,952 91	
Galt	12,434	1907		49,124 58	26,617 98	605,035 55	428,144 74		123
Gananoque		1890	577,498,490						
Georgetown									
Georich	4,300	1887		21,131 63	12,959 41	94,046 00	34,326 99	5,266 42	
Grimsby	1,784	1904	73,000,000	8,851 17	6,673 27	88,866 00	76,454 00	2,177 90	112
Gravenhurst	1,505	1909		4,131 72	1,832 76	37,983 19	31,436 16		269 86
Guelph	17,035	1880		61,893 28	43,874 99	463,002 97	441,185 31		5,616 91
Haileybury	5,000	1909	16,625,000	10,655 79	6,678 67	140,574 00	108,749 20		1,335 33
Hamilton	110,137	1859	5,461,313,465	433,494 79	112,431 94	4,724,667 00	2,793,450 00	188,471 85	135.8
Hanover	2,724	1901		2,687 82	3,157 47	58,745 15	38,278 21		2,451 60
Hawkesbury	5,400	1903	255,500,000	15,357 20	13,456 15	233,200 00	145,086 60		130
Hespeler	3,000	1916		4,821 61	2,123 74	72,924 00	65,461 53		584 07
Huntsville	2,160	1896		5,024 53	5,041 25		7,984 83		16 72
Iroquois	860	1886		1,848 25	779 02	39,400 00	17,446 45		299 23
Kitchener	21,052	1888	520,834,875	59,380 97	38,184 76	490,937 73	292,541 80	11,583 21	68
Kenora	5,000	1897		21,893 37	15,140 82			2,107 75	
Kincardine									
Kingston	23,261	1850	1,413,920,000	59,690 42	45,093 26	464,725 99	361,626 51	14,597 16	166
Kingsville	1,800	1894	84,000,000	4,950 61	4,848 51	54,500 00	24,310 83		145 80
Leamington									
Leaside	200			11,458 46	14,786 86	42,521 07	33,703 14		
Lindsay	7,880	1900	275,000,000	26,306 80	11,314 60	261,957 38	175,446 69	7,752 13	100
Listowel	2,400	1903	45,625,000	7,884 00	5,763 68	47,381 40	48,933 24		
London	59,100	1879	1,829,129,000	168,563 87	89,842 52	1,551,422 67	1,462,301 03	10,992 77	84.79
Lucknow	907	1890			3,467 90	10,000 00			
Markdale									
Markham	813	1890			1,317 98	30,488 75	23,096 32		553 34
Massey	814	1907	5,475,000	2,152 94	84 16	25,000 00	15,411 28	1,705 84	18.4
Merritton		1908		1,790 00		100,351 23			
	2,358	1888		10,582 77	3,884 49				
		1889							
Midland	5,532	1901		15,831 97	18,155 88	151,360 72	151,360 72		
		1902							

MUNICIPAL WATER WORKS.—Continued.

	Popula- tion	Year of Installation	Gallons of Water Consumed in Year	Earnings	Operating Expenses	Total Assets	Liabilities	Net Profit	Net Loss	Average daily consumption in gallons per head
Milton	1,800	1887	.....	\$2,312 89	\$1,285 08	\$35,000 00	\$8,813 92	\$1,027 81	.....	.....
Mimico	3,500	1916	25,050,000	6,043 92	5,900 39	116,244 18	117,703 79	143 53	.....	19.6
Mitchell	1,687	1873	.....	4,451 00	4,369 00	17,119 22	16,099 97	.....	\$1,309 52	.....
Morrisburg	1,500	1886	.....	3,995 96	1,540 02	25,000 00	.....	2,455 94	.....	.....
Mount Forest	2,100	1898	16,925,000	5,833 49	4,673 99	37,049 40	20,818 57	1,159 50	.....	22
New Liskeard	.....	1887	.....	.....	.....	.....	.....	.....	.....	.....
Newmarket	4,000	to 1915	181,000,000	8,007 31	4,007 31	75,900 00	15,614 60	4,000 00	.....	50
Niagara	1,918	1891	.....	8,019 14	9,220 08	59,835 30	22,412 87	.....	3,148 12	.....
Niagara Falls	14,307	1884	1,336,485,000	46,653 54	19,532 83	313,797 58	63,005 26	25,005 78	.....	210
North Bay	10,183	to 1891	.....	42,327 87	31,111 61	210,907 55	116,359 33	4,425 64	.....	.....
Orangeville	2,600	1895	.....	4,963 00	1,779 00	.....	.....	.....	.....	.....
Orillia	8,047	1913	210,621,900	25,453 72	30,212 35	253,751 63	154,123 40	.....	4,758 63	.....
Oshawa	10,126	1904	212,000,000	33,393 81	13,291 16	259,616 74	172,521 06	11,547 26	.....	.....
Ottawa, Eastview and Rockliffe	138,154	to 1874	7,848,043,020	375,763 92	187,601 19	4,648,182 34	3,490,174 01	.....	20,470 64	190.7
Owen Sound	12,218	1890	365,000,000	26,056 44	8,126 06	460,953 54	281,418 25	5,766 53	.....	81.84
Palmerston	1,870	1908	.....	6,817 73	4,873 96	49,622 00	36,774 00	.....	456 23	.....
Paris	4,866	1882	131,400,000	10,744 00	8,976 00	113,856 00	22,500 00	.....	2,577 00	73.98
Parry Sound	3,500	1892	118,000,000	12,682 95	7,019 99	89,873 23	27,140 57	2,225 45	.....	90
Penatanguishene	3,664	1990	94,900,000	9,361 95	10,849 66	105,928 12	59,712 39	.....	1,487 71	72
Peterborough	21,230	1882	1,128,080,000	65,099 53	23,351 07	730,173 97	693,494 89	1,027 49	.....	146
Pembroke	7,658	1893	274,342,512	21,778 81	12,676 62	328,064 97	187,464 07	.....	5,131 57	98.14
Petrolia	3,016	1896	315,800,000	22,540 11	24,494 21	191,837 02	44,281 25	.....	.....	190
Picton	3,500	1888	87,600,000	8,056 87	7,334 55	1,186 91	.....	.....	.....	7
Port Arthur	15,094	1902	1,614,930,000	112,778 68	39,347 46	1,747,843 75	1,883,601 83	.....	23,173 84	133.6
Port Colborne	3,325	1898	.....	3,950 00	3,700 00	53,000 00	28,640 00	.....	.....	.....

Port Elgin	1,300	1906	1,300	1906	2,808	2,034	42,000	30,500	Fire
Port Hope	2,660	1900	109,500	900	9,104	8,474	68,512	44,921	185
Port Perry	5,286	1906	2,628	000	22,876	10,241	180,747	160,673	108
Prescott	1,400	1910	2,628	000	3,726	3,278	41,746	33,942	49
Preston	5,645	1897	373,000	000	16,896	4,801	190,000	78,898	106
Rainy River	2,150	1912	17,000	000	4,184	2,596	63,004	45,422	Fire
Renfrew	13,000	1875	1,424	401,175	73,452	40,973	549,588	375,726	protec- tion
Ridgetown	21,637	1914	1,283	110,700	81,428	37,261	1,032,877	1,571	
Sarnia	3,643	1892	.....	.....	8,995	7,477	121,355	1,458	
Sault Ste. Marie and Steelton	2,075	1881	.....	.....	1,965	1,608	10,000	7,255	
Sandwich	937	1889	18,000	000	2,181	1,076	20,476	56,664	
Seaforth	4,017	1907	58,084	000	13,528	3,916	107,811	172,924	
Shelburne	6,665	1900	547,500	000	24,204	10,742	226,412	1,809	
Simcoe	1,455	1902	.....	.....	3,717	3,010	44,199	10,319	
Smith's Falls	870	1898	.....	.....	1,597	673	25,000	658,906	
Souhampton	22,000	1878	1,481	159,598	78,064	17,016	1,164,431	25,749	
Stayner	20,000	1890	650,000	000	55,658	42,347	585,607	93	
St. Catharines	3,800	.....	65,700	000	10,312	10,488	81,926	34,023	
St. Thomas	18,000	1883	320,248	000	50,418	45,816	526,738	511,418	
St. Mary's	1,025	1897	.....	.....	1,739	175	31,300	9,734	
Stratford	2,998	1903	70,000	000	7,364	9,563	71,653	73,852	
Stouffville	3,190	.....	.....	.....	5,838	2,947	44,375	187,032	
Strathroy	8,622	1895	420,537	000	38,244	20,796	283,809	1,124	
Sturgeon Falls	835	1889	.....	.....	.....	965	1,500	621	
Sudbury	1,465	1896	.....	.....	4,792	5,522	23,000	11,717	
Teeswater	.....	.....	.....	.....	.....	.....	.....	.....
Thessalon	4,600	1914	130,000	000	14,355	18,480	120,500	94,248	
Tilbury	499,278	1874	2,280,861	000,000	2,616,530	1,150,598	20,017,140	20,017,140	
Tillsonburg	.....	.....	.....	.....	.....	.....	.....	.....
Timmins	6,107	.....	109,500	000	7,615	5,215	27,356	24,211	
Toronto	2,217	1890	.....	.....	5,546	2,481	50,400	18,110	
Tottenham	5,476	1889	132,564	125	22,581	11,152	162,408	96,119	
Trenton	9,135	1888	.....	.....	33,068	33,301	297,972	197,677	
Trenton	.....	1912	.....	.....	.....	.....	.....	.....
Walkerton	.....	.....	.....	.....	.....	.....	.....	.....
Waterloo	.....	.....	.....	.....	.....	.....	.....	.....
Welland	.....	.....	.....	.....	.....	.....	.....	.....
Weston	.....	.....	.....	.....	.....	.....	.....	.....
Whitby	3,100	1905	164,250	000	10,334	10,472	104,717	75,845	
Wilton	1,650	1888	155,520	000	5,905	5,834	52,000	12,729	
Wingham	.....	.....	.....	.....	.....	.....	.....	.....
Woodstock	10,126	1892	462,873	330	34,464	28,584	357,002	174,486	

MUNICIPAL

Statement Compiled from Municipal Returns

	Popula- tion	Domestic Consumers	Commercial Consumers	Number of feet consumed during year	Number of feet purchased during year	Price paid per foot	Price received per 1000 feet
Belleville.....	12,240	.....	1,500	21,000,000	.....	.....	\$1 60
Brockville .....	.....	.....	.....	.....	.....	.....	.....
Deseronto.....	2,117	139	.....	.....	.....	.....	2 50
Guelph	17,000	Total Cons	umers 3,494	80,000,000	.....	.....	1 50
Kingston.....	24,000	Total Cons	umers 3,500	77,000,000	.....	.....	1 50
Kitchener.....	21,056	3,708	.....	72,906,700	.....	.....	1 25
Owen Sound	12,250	1,238	144	19,195,200	.....	.....	1 26
St. Catharines ..	20,000	.....	.....	6,816,400	2,665,000	\$0 35	\$1 and 2 00
St. Thomas	17,759	3,599	.....	72,320,500	.....	.....	1 35
Waterloo.....	5,460	872	12,357,526	1 90

NATURAL

Leamington.....	3,069	950	199,946,000	\$0 25
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GAS WORKS.

for the Year Ending 31st December, 1919.

Earnings	Operating Expenses	Assets	Liabilities	Net Profit	Net Loss	
\$42,223 39	\$40,503 29	\$129,921 64	\$131,722 84	.....	\$2,776 67	.....
.....
3,807 38	5,508 99	31,115 95	14,930 48	.....	1,701 61	Ceased operation June 30th, 1919
118,718 80	91,005 35	305,617 06	95,639 53	\$3,357 91	.....	.....
118,239 54	99,099 14	437,571 53	304,607 13	.....	.....	.....
109,549 05	91,898 08	385,645 79	387,029 43	.....	1,383 64	.....
36,200 21	26,464 73	212,526 14	210,093 30	2,367 03	.....	.....
10,370 47	19,617 43	84,556 04	84,556 04	.....	9,246 96	Ceased operation June 15th, 1919
132,384 00	131,403 05	310,517 17	197,427 94	14,147 88
24,351 10	17,196 12	70,469 37	48,369 20	4,530 79

GAS.

\$21,419 60	\$9,784 00	
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NINETEENTH ANNUAL REPORT

OF THE

Temiskaming and Northern Ontario Railway Commission

ONTARIO GOVERNMENT RAILWAY

HQN. E. C. DRURY, PREMIER

For the Year Ended October 31st

1920

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO

Printed and Published by CLARKSON W. JAMES, Printer to the King's Most Excellent Majesty

1921

Printed by
THE RYERSON PRESS.

TO HIS HONOUR, LIONEL H. CLARK,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to your Honour the Nineteenth Annual Report of the Temiskaming and Northern Ontario Railway Commission for the fiscal year ended October 31st, 1920.

Respectfully submitted,

E. C. DRURY,

Prime Minister and President of the Council.

HON. E. C. DRURY,
Prime Minister and President of the Council,
Toronto.

SIR,—I have the honour, by direction, to submit herewith the **Nineteenth**
Annual Report of the Temiskaming and Northern Ontario Railway Commission
for the fiscal year ended October 31st, 1920.

I have the honour to be, Sir,

Your obedient servant,

W. H. MAUND,
Secretary-Treasurer.

TEMISKAMING AND NORTHERN ONTARIO RAILWAY COMMISSION

General Remarks

Accounts and statistics for fiscal year ending October 31st, 1920:

MILEAGE IN OPERATION ON OCTOBER 31ST, 1920.

	Miles.	Miles.
Main Line—		
North Bay to Cochrane.....		252.29
Branch Lines—		
Charlton Branch.....	7.60	
Porcupine (Iroquois Falls).....	40.11	
Elk Lake Branch.....	28.50	
		76.21
Nipissing Junction Spur (leased)		2.10
Yards and Sidings—		
Main line and branches.....	116.73	
Liskeard Spur.....	1.12	
Mattagami River Spur	2.96	
		120.84
Double Track.....		1.70
Leased to Nipissing Central Railway—		
Main Track.....	10.45	
Yard Track and Sidings.....	1.65	
Private Sidings	1.12	
		13.22
Total mileage		466.36

The following statement shows the earnings and expenditures for fiscal year 1920, compared with fiscal year 1919.

Receipts—Fiscal Year	1920	1919
Revenue from transportation	\$3,926,044 92	\$3,014,594 06
Revenue other than transportation....	162,499 09	122,158 70
Total operating revenue	\$4,088,544 01	\$3,136,752 76
Operating expenses	3,687,999 28	3,076,130 02
Net operating revenue	\$400,544 73	\$60,622 74
Ore royalties	57,296 28	25,396 08
Rent from joint facilities	16,269 72	15,037 86
Rent from lease of road	12,271 36	12,231 33
Interest and exchange	Dr. 5,918 12	Dr. 12,547 98
Hire of freight cars and passenger cars	Dr. 189,011 38	Dr. 60,496 89
Miscellaneous income	7,389 64	12,910 18
Net earnings	\$298,842 23	\$53,153 32

Ratio of operating expenses and net operating revenue to total operating revenue for foregoing comparative fiscal years is as follows:

1920	Operating expenses.....	90.2%	Net earnings.....	7.8%
1919	Operating expenses.....	98.1%	Net earnings.....	1.9%
Total operating revenue 1920 exceeds 1919 by \$951,791.25, or 30.4%.				

EXPENDITURES.

Expenditures—Fiscal Year	1920	1919
Maintenance Way & Structures	\$813,763 46	\$789,431 65
“ Equipment	770,627 57	594,401 64
Traffic expenses	21,666 17	19,504 73
Transportation expenses	1,887,417 25	1,499,314 90
Miscellaneous expenses	61,927 43	51,167 33
General expenses	133,328 85	123,460 28
Transportation for investment Cr.	731 45	1,150 51
Total expenditures	\$3,687,999 28	\$3,076,130 02
Operating revenue per mile of road...	12,446 10	9,548 72
Operating expenses per mile of road...	11,227 00	9,364 10
Net operating revenue per mile of road	909 71	162 05
Miles operated	328.5	328.5

Net revenue in 1920 increased \$737.66 per mile of road as compared with 1919.

Though the operating revenues for 1920 show an increase of \$951,791.25 for the period, the expenditures also increased by approximately \$612,000 and this is accounted for largely by the increased cost of labour and certain maintenance accounts *et al.*

Due to decision No. 2 of the United States Labour Board, at Chicago, arrived at on July 20th, 1920, establishing certain increases in rates of wages covering all classes of railway employees the same ratio of increase was adopted by Canadian railways and became effective—and retroactive—as of May 1st, 1920. In consequence of this action, Commission’s wage account increased in 1920 approximately \$260,000 over that of preceding fiscal year.

Under the heading of Maintenance of Way, the removal of snow and ice from tracks and yards exceeded the previous year’s cost by \$32,000 and in accordance with the Commission’s policy in relation to maintenance of equipment, the rolling stock was kept up to the highest standard of efficiency, involving an increased expenditure of \$121,000 for locomotive repairs; \$35,000 for freight car repairs, and sundry other items of like nature. The following table will show the exact standing of comparative years under this heading:

EQUIPMENT REPAIRS.

	1920	1919
Locomotive—repairs	\$417,300 47	\$286,400 19
Passenger cars—repairs.....	148,459 87	118,697 05
Freight cars “	64,707 48	55,847 72
Work equipment “	35,923 60	27,089 57
	\$666,391 42	\$488,034 53

This account in 1920 shows an increase of \$178,356.89 over 1919, equal to 36.6 per cent. During present fiscal year Commission have also provided for depreciation on equipment covering all classes of rolling stock to the extent of \$57,493.92 for the period.

The gross operating revenue and net earnings for the period 1919-20 fiscal years, is as follows:

1919	\$3,136,752 76	\$53,153 32	1.70%
1920	4,088,544 01	298,842 23	6.01%

Ore royalties during same period were:

1919	\$25,396 08
1920	57,296 28

Increase 1920 over 1919, \$31,900, equal to 124%.

The result of freight traffic handled during 1920 shows tonnage of freight earning revenue to have increased to the extent of 282,140 tons, equal to 26 per cent., and the total train mileage increased approximately 200,000 miles, locomotive mileage 225,000 miles, and car mileage 250,000 miles.

SURVEYS

James Bay Surveys:

A small party, in charge of Mr. W. R. Maher, spent about four months during the winter of 1919-20 in exploratory surveys between Cochrane and James Bay. An approximate line of levels was carried through to tide water at Moose Factory. The information that has been collected will be of great value in reaching a decision upon the route to be followed.

ADDITIONS TO ROAD AND EQUIPMENT

During the present fiscal year contracts for additional steam locomotives were placed:

Two Switchers (0-8-0), Montreal Locomotive Works Limited, Montreal,

Four Mikados (2-8-2), Canadian Locomotive Company, Limited, Kingston.

Delivery of these locomotives will be made early in the year 1920-21. These are being built from designs and specifications prepared by the officers of the Mechanical Department of the Railway, and represent the best modern practice as adapted to the requirements of the Commission.

Again this year a shortage of labour prevailed and considerable difficulty was experienced in securing certain classes of materials. This condition prevented the completion of the contemplated betterments to the property. The more important of the additions and betterments are as follows:

North Bay Junction:

The enlargement of the yard and the additions to the Stores Buildings, under construction at the close of the last fiscal year, have been completed.

Tenders were called for the removal of a considerable quantity of rock at the rear of the round-house to allow for much needed improvements to the north end of the yard. The successful tenderer, Mr. S. De Rosa, has this work well under way.

A frame car repair shop, 105 feet by 37 feet, was erected in the repair yard.

A frame frog repair shop, 60 feet by 24 feet, was built with necessary forge hoists, etc., for doing repairs to track material.

An electric motor driven railsaw was installed in the material yard for the reclaiming of worn and battered rails.

A brick burner, with necessary piping, fans, etc., was erected for the B. & B. Department wood-working shop to take care of shavings, refuse, etc.

Widdifield:

A concrete foundation was built under the section house.

Mileage 24.7:

The spur siding at mileage 20.5, owned by the Town of North Bay, was transferred to the George Gordon Company early in the year and subsequently moved to mileage 24.7 for that Company.

Mileage 35.25:

The open beam culvert at this point was replaced by one 17.5-foot concrete slab on concrete piles.

Mileage 45.79:

The open beam culvert at this mileage was replaced by a double 36-inch concrete pipe culvert.

Bushnell:

A concrete foundation was built under the section house.

Mileage 49.9:

The spur siding belonging to the McNamara Lumber Company, was extended 805 feet. This siding is used for loading logs.

Mileage 55.94:

The concrete pipe culvert at this point being too small to properly take care of the water, it was replaced by an 8-foot by 8-foot concrete box culvert.

Doherty:

A section employees' camp, 14 feet by 18 feet, was built and the section house moved to a more suitable location, and placed on a concrete foundation.

Temagami:

A 50-ton coaling plant, in frame construction, is now being erected.

Mileage 75.5:

The timber trestle at Net Lake was replaced by five 15-foot concrete slabs on concrete piles.

Rib Lake:

A side track, 800 feet long, was put in to keep the passing tracks clear of cars.

Johnson:

A section employees' camp, 14 feet by 18 feet, was built for the use of section labourers.

Mileage 97.2:

The open beam culvert at this mileage was replaced by a 6-foot by 6-foot concrete box culvert.

Mileage 98.9:

This open beam culvert was replaced by a 6-foot by 6-foot concrete box culvert.

Haileybury:

A hot air heating system was installed in the section house by contract.

Uno Park:

A section employees' camp, 14 feet by 18 feet, was built for the use of section labourers.

Kenabeek:

A spur siding, 263 feet long, was put in for D. McLellan, for the handling of forest products.

Mileage 12.3 Elk Lake Branch:

The spur siding was extended 200 feet.

Heaslip:

A section employees' camp, 14 feet by 18 feet, was constructed for the use of section labourers.

Mileage 6¼ Charlton Branch:

The filling of the timber trestle was completed by the contractor, Mr. Angus Sinclair.

Mileage 141.1:

The open beam culvert was replaced by an 8-foot by 10-foot concrete box culvert.

Mileage 143.3:

The open beam culvert was replaced by a 6-foot by 6-foot concrete box culvert.

Mindoka:

A crossover, 233 feet long, was installed between the main line and the passing siding.

The water tank at this station, which was burned last winter, was rebuilt.

Dane.

An extension, 24 feet by 20 feet, was built to the south end of the station, to provide additional accommodation for the handling of traffic at this station.

Swastika:

The new frame station, under construction at the close of the last fiscal year, was completed.

Kenogami:

A side track, 905 feet long, was put in, for the loading of forest products, etc.

Mileage 169.5:

A spur siding, 350 feet long, was put in for H. Oakes, for the handling of supplies to his camps.

Mileage 181.7:

The open beam culvert at this point was replaced by an 8-foot by 8-foot concrete box culvert.

Bourkes:

A side track, 838.5 feet long, was put in for a loading siding for the settlers.

Mileage 185.5:

A spur siding, 396 feet long, was put in to provide facilities to the settlers in this vicinity for loading pulpwood, etc.

Scotty's Springs:

A passing siding, 3,500 feet long, and a loading siding, 600 feet long, are now under construction.

Matheson:

A spur siding, 815 feet long, was put in for the Matheson Products Limited, to serve their brick yard.

Three sidings, with a combined length of 3,813 feet, were put in for Messrs. Morrow and Beatty, to handle supplies, etc., to their wharf at the Black River.

Watabeag Pit:

A siding, 680 feet long, was put in for the A. P. & P. Co. for loading gravel.

Nushka:

A side track, 1,054 feet long, was put in for loading pulpwood, etc.

Mileage 231.5:

A passing siding, 3,500 feet long, is now under construction.

Holland:

A shelter station, 10 feet by 30 feet, a tool house 14 feet by 16 feet, a standard section house and a standard employees' camp, were built. The section house and tool house replace the ones burned in 1919.

Mileage 245.5:

The wooden culvert at this mileage was replaced by 6 foot by 6 foot concrete box culvert.

Cochrane:

The brick house for Agent, under construction at the close of the last fiscal year, was completed.

A brick building, 50 feet by 30 feet, was built at the west end of the station for express room and kit room. This work was done by contract.

An umbrella roof was built over the platform at the freight shed.

The station platform was extended 100 feet at each end.

PORCUPINE BRANCH

Standard shelter stations were placed at the following points: Fielding, McIntosh Springs, Barbers Bay, Drinkwater Pit and Dome Mines.

Alexo:

Two spur sidings, totalling 1,006 feet, were put in for the A. P. & P. Co., for loading gravel.

Barbers Bay:

A siding, 375 feet long, was put in for the St. Maurice Lumber Company to facilitate the loading of pulpwood at their mill.

Mileage 16.

A spur siding, 304 feet long, was put in for A. T. Bisson, for the loading of forest products.

Mileage 32.2:

A spur siding, 1,308 feet long, was put in for the Hollinger Consolidated Gold Mines Limited, for handling coal.

Timmins:

A spur siding, 765 feet long, was put in on the Mattagami Spur east of Mount-joy Creek.

An extension, 203 feet long, was made to the above spur for the Pierce Lumber Co., under private siding agreement.

Except where otherwise noted, all the foregoing works were done by the Commission's forces.

TIE SUPPLY

The Commission entered into a third contract with Messrs. Reamsbottom and Edwards, of South Porcupine, for the manufacture of ties from timber on the Commission's reservation in the Townships east and south of Night Hawk Lake.

The rail renewals for the year were as follows:

Mileage 51.0 to 55.2	Main Line—	4.2 miles	90 lb. A.R.A. rail.
" 109.8 to 118.7	"	— 8.9 miles	90 lb. A.R.A. rail.

Total —13.1 miles new rail.

EQUIPMENT OWNED.

The following list shows the equipment in detail owned by Commission:

40 Road locomotives.	3 Wooden snow plows.
4 Switching locomotives.	1 Steel snow plow.
13 "First class" wooden passenger coaches.	3 Snow flangers.
6 "First class" steel passenger coaches.	6 Ballast plows—3 right hand, 3 left hand.
14 "Second class" wooden passenger coaches.	3 Centre ballast plows.
4 "Second class" steel passenger coaches.	2 Jordan ballast spreaders.
2 Combination wooden second class and baggage cars.	1 Centre ballast spreader.
1 Combination wooden first class and baggage car.	2 "Lidgerwood" rapid unloaders.
1 Exhibition car.	1 Pile driver.
3 Parlor cafe cars.	1 American railroad ditcher.
6 Wooden baggage and express cars.	1 Locomotive crane.
4 Steel baggage and express cars.	3 Steam shovels.
4 Wooden mail and express cars.	2 Steam wrecking cranes.
3 Steel mail and express cars.	2 Auxiliary boarding cars.
24 Conductor vans.	2 Auxiliary tool cars.
9 Stock cars.	2 Auxiliary cars, road department.
240 Box cars.	2 Auxiliary cars, track material.
90 Steel underframe flat cars.	2 Crane cabin cars.
237 Wooden flat cars.	2 Road cabin cars.
12 Steel dump cars—drop bottom.	1 Pile driver tank car.
59 Hart convertible cars.	58 Boarding cars.
4 Twelve-yard dump cars.	6 Tank cars for fire protection.
	8 Combination boarding and material cars.
	8 Maintenance of way material cars.
	1 Car department material car.

TELEGRAPH AND TELEPHONE.

During fiscal year 1920, the volume of Commission's Commercial Telegraph and Telephone business materially increased. In June the local telegraph rates were increased from twenty-five cents to thirty cents for ten-word messages and from one cent to two cents for each additional word. A corresponding increase at this time was made by the Canadian Pacific Railway Telegraph and also by the Great North Western Telegraph Company. No increase was made in long distance telephone messages.

In December, 1919, one metallic circuit of No. 8 iron wire was installed between Swastika and Kirkland Lake under lease to Mr. Hamilton B. Wills, Toronto, and five metallic circuits of No. 12 iron wire were installed to provide for the increased telephone business in this district.

March, 1920, saw the completion of a phantom telephone circuit between North Bay and Cobalt, introducing an additional circuit between these points without stringing new wires. This circuit has given complete working satisfaction.

New ten-pin cross arms were erected between Cobalt and New Liskeard, and new six-pin cross arms between New Liskeard and Porquis Junction.

Between Englehart and Dane—a distance of twenty-two miles—the pole line was entirely renewed and now consists of forty poles per mile instead of thirty-two to thirty-five as formerly.

A sufficient quantity of No. 10 N.B.S. copper wire was purchased for a new metallic telephone circuit from Cobalt to Porquis Junction, and at the end of the fiscal year, is strung as far as Dane. This circuit will be completed about December 1st, and will provide much more adequate facilities for handling of long distance telephone business from Cochrane, Iroquois Falls, South Porcupine, and Timmins.

During the year, fifty-four subscribers' telephones were installed, and fourteen removed.

No serious interruptions to the service were experienced by fires or storms during the year, and all lines have undergone general repairs and are in consequence in first-class condition in every respect.

The following is a summary of the mileage of telegraph and telephone wires in service on October 31st, 1920:

Kind	Gauge	Service	Miles
Iron	No. 8 B.W.G.	Telegraph	1,694
Iron	No. 12 B.W.G.	L. D. Telephone	177
Iron	No. 12 B.W.G.	Local Exchange and Party Lines	308
Copper	No. 9 B. & S.	Telephone Train Despatching	574
Copper	No. 10 N. B. S.	L. D. Telephone	886
Copper	No. 12 B. & S.	L. D. Telephone	228
Style B.	Twisted Pair.	Local Exchanges	52,500 ft.
Wire Miles			3,867
Pole Miles			341
Phantom Circuits in Operation			103

MINING INDUSTRY

The preliminary report of the Mining Industry in that part of Northern Ontario served by the Temiskaming and Northern Ontario Railway, calendar year 1920, submitted by Arthur A. Cole, Mining Engineer of Commission, reads as follows:

GOLD

Porcupine:

The year opened with production costs still high and a paucity of skilled labour. Two parties of Cornishmen of about 100 in each party, which arrived in the fall for the Dome and McIntyre Mines, helped to relieve the situation, and the closing down of many industries in other parts of the Province worked to the advantage of the gold mines by supplying ample labour, that had long been lacking.

A marked shortage in the rainfall in the district threatened a curtailment of production on account of the shortage of power, but rains early in December have relieved the situation materially. Even now the Hollinger is increasing its output and the prospects are bright for an increased production for the gold country with the melting of snows in the spring.

The preliminary report of the Ontario Bureau of Mines for the first nine months of the year shows a production of \$7,938,649 from 903,945 tons, or an average recovery of \$8.78 per ton. This was made up from the following mines:

Hollinger	\$4,620,800
McIntyre	1,603,376
Dome Mines	1,515,086
North Crown	70,406
Porcupine Crown	70,962
Dome Lake	46,809
Davidson	11,210
	<hr/>
	\$7,938,649

Kirkland Lake:

The production for nine months was:

Lake Shore	\$371,359
Kirkland Lake	215,558
Teck-Hughes	182,152
	<hr/>
	\$769,069

This was produced from 69,328 tons, or at the rate of \$11.09 per ton. The 150-ton mill of the Wright-Hargraves is now practically completed and will be ready for operating as early in the new year as power can be supplied. There is also a likelihood of the Ontario Kirkland building a 100-ton mill next year, and the Lake Shore will also likely increase their milling capacity.

Boston Creek:

Development is being prosecuted on the Miller Independence and a road has been built east from this property through the Townships of Catharine and Skeed, giving access to some very promising gold prospects.

Larder Lake:

Operations by the Associated Goldfields consist for the most part of an extensive diamond drilling programme testing out their ore bodies at depth.

The Argonaut Gold Mine in the Township of Gauthier, situated about midway between Larder Lake and Kirkland Lake, continued development of a promising ore body and made a small production of gold from their little stamp mill.

SILVER

Cobalt:

Mining conditions in the Cobalt Silver Area for the first nine months of the year were very similar to those in the Gold District. Although there was a considerable shortage of labour, the price of silver was high and the production shows an increase of 355,736 ounces over the first nine months of 1919. The trend of the silver market is shown in the following table:

SILVER PRICES IN NEW YORK, 1920

Month.	Highest.		Lowest.		Average.
January	(12th)	\$137,000	(16th)	\$128,500	\$132,827
February	(2nd)	134,500	(24th)	129,000	131,295
March	(2nd)	132,000	(12th)	117,000	125,561
April	(6th)	127,000	(30th)	111,500	119,779
May	(3rd)	110,500	(19th)	99,750	102,585
June	(2nd)	99,625	(16th)	80,000	90,957
July	(26th)	95,000	(19th)	88,750	91,971
August	(20th)	101,750	(4th)	92,750	96,168
September	(15th)	95,000	(1st)	91,500	93,675
October	(1st)	91,500	(19th)	76,250	83,480
November	(11th)	82,875	(30th)	68,125	77,734

During the eleven months the highest price was \$1.37 per ounce on January 12th, and the lowest was 68½ cents per ounce on November 30th.

Lack of power from shortage of rain, materially affected the silver production in the fall, and by the time this was temporarily relieved by rains early in December, the rapid fall in the price of silver was such that the mines that closed down for lack of power will remain closed until the silver market revives, and others which can continue operations, will do so with reduced staffs, hoping that with the opening of spring and the betterment of power conditions, the silver market will be stronger.

Mines shipping over half a million ounces in the first nine months of the year are given as follows:

Nipissing, Mining Corporation, O'Brien, Coniagas, Kerr Lake.

TEMISKAMING TESTING LABORATORIES

The following table shows the tonnage sampled in the plant during the nine months ending September 30th.

ORES AND CONCENTRATES SAMPLED BY THE TEMISKAMING TESTING LABORATORIES DURING THE NINE MONTHS ENDING SEPTEMBER 30, 1920.

Mine or Company.	Ore. Tons of 2,000 lbs.	Concentrates. Tons of 2,000 lbs.
McAndrew	1.073	183.67
Northern Customs Concentrators.....	1.434	265.22
Crown Reserve	12.232	
Castle (Tretheway)	34.40	
Devlin & Enright	1.48	
Temiskaming		198.19
Cobalt Provincial	6.24	99.59
Kerr Lake	197.40	
White Reserve	0.48	
Glendenning (Bonsall)	12.17	
Beaver	23.95	25.83
La Rose	Bullion	

Mine or Company.	Ore. Tons of 2,000 lbs.	Concentrates.
Brewer & Brewer	1.84	
McKinley-Darragh	0.87	82 90
Shack Lake	0.78	
Edwards & Wright	1.42	
Right of Way	1.30	
Silver Queen (Post lease)	3.08	
do (Angus lease)	3.29	
Peterson Lake	4.19	
Aladdin Cobalt	3.96	
Bailey	5.76	
Mining Corporation	35.49	
Total	352.839	855.40

The silver content in the above ore and concentrates was 836,198.65 fine ounces.

Besides the above sampling, a general customs assay business was conducted and a testing laboratory opened, in which tests of ores were made for such treatments as amalgamation, water gravity concentration, oil flotation, or cyaniding.

Purchasing and Stores

Statement of Purchases and Issues of Materials for Fiscal Year 1920, compared with that of 1919, shows as follows—

Stock.	1919		1920	
	Purchases.	Issues.	Purchases.	Issues.
	\$ c.	\$ c.	\$ c.	\$ c.
Shop	714,373 25	639,842 81	793,403 64	756,754 62
Soft Coal	528,227 87	608,157 66	609,890 78	725,303 20
Hard Coal.....	9,558 17	8,553 88	5,772 26	7,778 41
Oil and Waste.....	26,162 02	26,264 44	40,698 06	39,441 25
Stationery.....	25,099 04	20,093 12	31,789 27	29,006 33
Rails.....	219,849 21	143,341 06	98,991 51	106,870 35
Ties.....	100,048 33	95,048 28	122,120 42	89,728 83
Ice.....	8,276 25	6,069 69	10,186 01	6,816 88
Nipissing Central Railway	54,901 03	46,025 78	35,465 30	38,983 55
	1,686,495 17	1,593,396 72	1,748,317 25	1,800,683 42
		1919	1920	
Total Purchases	1,686,495 17	1,748,317 25		
Total Issues.....	1,593,396 72	1,800,683 42		
		3,279,891 89	3,549,000 67	

COUNSEL'S REPORT TO COMMISSION

Litigation:

At the close of the financial year the only action in which the Commission was Plaintiff was one against the Abitibi Pulp and Paper Company for indemnity under Siding Agreement in respect of amounts paid in settlement of two claims arising out of an accident on the siding of the Abitibi Company at Iroquois Falls. This action is still standing for trial.

The only action pending in which the Commission is defendant is the following:

Legault vs. T.N.O. Railway—action by the plaintiff, for damage to automobile and personal injuries sustained at a level crossing at or near Englehart.

Damage Claims:

As usual, a large number of claims have arisen during the year in respect of Freight, baggage, etc., lost, destroyed, delayed, mislaid or damaged, also claims for personal injuries and for horses and other animals killed or injured on the Commission's right-of-way, and claims of passengers for delay. Most of these claims have been adjusted or abandoned while others are still pending. None have been placed in suit.

Matheson Fire Claims:

The Government directed the Commission to enter into an agreement submitting to arbitration the claims of a number of the residents of the Town of Matheson who allege that the fire which destroyed that town in July, 1916, was caused by negligence of the Commission, its workmen, servants or agents in setting out and starting a fire on or near the Commission's property at or near the Town of Matheson. James Milne, Sr., of North Bay, has been appointed the Commission's arbitrator, and Dr. Kenzie, of Hearst, the claimants' arbitrator. His Honour, Judge Denton, has been appointed third arbitrator. The agreement of submission has not yet been executed, although negotiations for settlement of terms thereof are pending.

Grand Trunk Railway, Grand Trunk Pacific Railway, National Transcontinental Railway:

This matter is still standing for adjustment. Meantime the temporary through train service over the Commission's line is being maintained.

North Bay Terminal Facilities:

Application received from the Grand Trunk Railway for additional terminal facilities at North Bay. Application not yet dealt with and negotiations still pending.

Restaurant Privileges:

Restaurant privileges at Cochrane have been granted to Arthur Stevens and an agreement on terms satisfactory to the Commission has been prepared and executed.

Restaurant privileges at Temagami and Englehart have been granted to Herbert William Wilson and D. W. Porter, respectively, on terms satisfactory to the Commission. Agreements in course of preparation.

Cobalt Cartage:

An agreement has been entered into with Wilson Brothers for the handling of the Commission's cartage business at Cobalt on terms satisfactory to the Commission.

Railway Tie Contract:

Agreement has been entered into with Messrs. Reamsbottom and Edwards for the manufacture and delivery of the Commission's supply of railway ties, lumber and timber, on terms satisfactory to the Commission.

Locomotive Contracts:

Agreements have been entered into with the Montreal Locomotive Works and the Canadian Locomotive Company, respectively, for the construction of two switching and four Mikado type locomotives for the Commission.

News Privileges—Cobalt Station:

Agreement with the Canada Railway News Company, covering the news privileges at Cobalt Station, renewed for one year.

Mining Leases:

Mining lease has been entered into with Charles B. Shaffer, covering 35.4 acres, more or less, of the Commission's lands in the Township of Masonville, in the District of Temiskaming, for a cash consideration of \$3,540, and the payment of a royalty of 5 per cent. of the net profits of mining operation.

Steel Rails Contract:

Claim by Commission against Algoma Steel Corporation for delivery of balance of steel rails due under two contracts. The Algoma Steel Corporation contended that it was not bound to make delivery on account of conditions brought about by war. Negotiations completed compromising matter on terms satisfactory to the Commission.

Agreements, Leases, Contracts, Etc.:

As usual, a large number of agreements, leases, contracts and other documents covering various miscellaneous matters between the Commission and others have been prepared and executed.

AUDITOR'S REPORT.

We have pleasure directing attention to letter from Edwards, Morgan & Co., Chartered Accountants, Toronto, respecting Commission's accounts.

G. W. LEE, Esq.,

*Chairman, Temiskaming and Northern Ontario Railway Commission,
Toronto, Ont.*

DEAR SIR,—Acting under instructions from the Commissioners, we have maintained a running audit of the accounts of the Commission for the year ending October 31, 1920. Our audit has covered Cash Receipts and Disbursements, Accounts Payable and Collectible, Agents' and Conductors' Accounts, Foreign Tickets, Foreign Freights, Car Mileage Accounts and Bank Balances. All transactions relating thereto have been accounted for. We have verified the balances of outstanding accounts, which are properly set forth in the General Ledger.

All information asked for has been cheerfully given. The books are in good order.

We are,

Yours faithfully,

(Sgd.) EDWARDS, MORGAN & Co.

FINANCIAL STATEMENTS

GENERAL BALANCE SHEET, October 31st, 1920

ASSETS.		LIABILITIES.	
Property Owned		Provincial Loan Account	\$22,681,505 65
Cost of Road as of October 31, 1919	\$18,860,510 38	Working Liabilities:	
Cost of Road for year ended October 31, 1920	346,691 56	Audited Accounts	\$723,837 45
	\$19,207,201 94	Traffic Balance—Car Service	70,542 30
Cost of Equipment as of Oct. 31, 1919	\$2,950,232 90		794,379 75
Cost of equipment for year ended October 31, 1920	40,180 14		
Investment Nipissing Central Railway	2,990,413 04	Deferred Credit Items:	
Temiskaming Testing Laboratories	562,383 31	Accrued Depreciation	\$429,805 28
Working Assets:	32,250 56	Deposits on Sidings	5,256 00
Cash	419,577 74	Deposits on Contracts	1,416 25
Cash, Land Agent	1,871 43	War Tax	1,386 03
Accounts Collectible	408,357 42	In Suspense	35,795 94
Balance due on Townsite Sales	26,554 30		473,659 50
Agents and Conductors	22,367 97	Free Surplus:	
Traffic Balance—Freight	142,421 54	Profit and Loss—balance	628,839 30
Traffic Balance—Tickets	2,717 04		
Material and Supplies	677,783 42		
Ballast Pit Operations	50,175 78		
Other Assets	1,379 56		
	1,753,206 20		
Deferred Debit Items:			
Treasurer's and Paymaster's Advance	\$7,050 00		
Insurance paid in advance	1,825 96		
Surveys	23,803 98		
Accounts in Suspense	249 21		
	32,929 15		
	\$24,578,384 20		\$24,578,384 20
PROFIT AND LOSS.		PROFIT AND LOSS.	
Townsites	\$402 29	By Balance, October 31, 1919	\$380,083 84
Uncollectible Accounts	294 27	Result operation for year ended October 31, 1920	298,842 23
Empire Lumber Co. Plant—Latchford	1,193 70	Adjustment Stores Accounts to Inventory	49,898 30
Paid Treasurer of Ontario	100,000 00	Unclaimed Wages	1,560 75
Balance carried forward	628,839 30	Unclaimed Vouchers	65 00
		Profit—Retired Road and Equipment	279 44
	\$730,729 56		\$730,729 56

STATEMENT OF EXPENDITURES ON CONSTRUCTION.

Fiscal Year Ended October 31, 1920.

Road.

1	Engineering	\$41 31	
2	Land for transportation purposes	6,471 29	
3	Grading	29,094 71	
6	Bridges, trestles and culverts	56,339 02	
8	Ties	5,895 14	
9	Rails	33,979 10	
10	Other track material	42,267 94	
11	Ballast	967 76	
12	Track laying and surfacing	8,161 58	
13	Right-of-way fences	14,430 71	
15	Crossings and signs	1,085 63	
16	Station and office buildings	51,108 80	
17	Roadway buildings	15,904 09	
18	Water stations	13,052 54	
19	Fuel stations	10,119 49	
20	Shops and enginehouses	7,824 27	
26	Telegraph and telephone lines	31,666 07	
27	Signals and interlockers	8 32	
37	Roadway machines	3,872 09	
44	Shop machinery	14,401 70	
			\$346,691 56

EQUIPMENT.

51	Steam locomotives	\$50,383 24	
53	Freight train cars	11,188 34	Cr.
54	Passenger train cars	531 50	
57	Work equipment	453 74	
			\$40,180 14
			\$386,871 70

DETAILS OF CHARGES TO CONSTRUCTION.

Road.

Increased weight of rail	\$23,215 19
Additional track fastenings	12,065 65
Fencing—right of way	13,935 99
Additional yard tracks—North Bay Junction	13,460 57
Public and private road crossings—branch lines	312 57
Public and private road crossings—main line	728 53
Spur—Timmins to Mattagami River	10,751 42
Coal dump track—North Bay Junction	1,219 69
Siding—Rib Lake	3,073 06
Siding—Mileage 110.5	1,011 91
Siding—Chamberlain	173 51
Siding—Kenogami	1,168 91
Siding—Bourkes	1,930 60
Siding—Mileage 186	1,425 55
Siding—Scotty's Springs	15,193 10
Siding—Ramore	595 32
Siding—Nushka	861 17
Siding—Mileage 216.6	307 75
Siding—Porquis Junction	1,353 91
Siding—Mileage 232	1,499 12
Siding—Holland	1,581 86
Siding—Mileage 12.3—Elk Lake Branch	256 06
Siding—McIntosh Springs	437 19
Siding—Timmins	80 24
Siding—Mattagami Heights	2,064 63
Siding—Iroquois Falls	6,901 04
Private sidings installed and removed	9,911 03
Revision of line—Mileage 63-66.5	4,135 86
Main line changes—North Cobalt	1,405 96
Replacing bridge—Mileage 35—with concrete slabs	1,950 74
Replacing timber trestle—Mileage 75—with concrete slabs	11,998 00
Filling trestle and installing culvert—M.6¼, Charlton Branch	19,480 04
Replacing open beam culverts—Mileages 55.94, 97.22, 98.99, 141.1, 143.3, 181.7	20,894 63

Replacing timber culvert—Mileage 188.9—with concrete	\$3,290 15	
Replacing timber culvert—Mileage 245½—with concrete	4,117 11	
Car repairers' shop—North Bay Junction	4,672 64	
Stores buildings—North Bay Junction	11,710 07	
B. & B. carpenter shop and woodworking machinery—North Bay Junction	2,191 36	
Freight office—North Bay	43 40	
Roundhouse floor—North Bay Junction	824 73	
Frog repair shop—North Bay	1,656 71	
Coaling plant, etc.—North Bay	1,190 50	
Tinsmith and electric welders' shop—North Bay Junction	902 62	
Coaling plant, etc.—Temagami	10,352 29	
Kaustine equipment—North Cobalt Station	215 25	
Section foreman's house—Haileybury	539 43	
Freight shed—New Liskeard	30 08	
Section employees' bunk houses—Heaslip, Johnson, and Uno Park	1,537 15	
Water tank—Mindoka	2,792 75	
Freight shed—Dane	919 47	
Combined station and agent's house—Swastika	7,859 50	
Agent's house—Bourkes	64 78	
Plumbing system, station—Matheson.....	1,240 04	
Combined waiting room and freight shed—Wasach	97 97	
Combined waiting room and freight shed—Holland	1,960 43	
Section and tool house—Holland	4,469 29	
Bachelor Camp—Holland	358 43	
Agent's house—Cochrane	5,372 95	
Extension station platform, etc.—Cochrane	2,348 72	
Cover for freight shed platform—Cochrane	1,336 56	
Express and kit rooms, etc.—Cochrane Station	17,209 96	
Plumbing and water supply—buildings—Elk Lake	338 86	
Electric wiring—section house—Charlton	108 68	
Combined waiting rooms and freight sheds—Fielding, McIntosh Springs, Barbers Bay, Drinkwater Pit, and Dome Junction	1,613 79	
Raising agent's house—South Porcupine	615 79	
Plumbing and heating systems, agent's house—South Porcupine	453 33	
Timmins Station	92 17	Cr.
Insulation steam supply—various shops	434 19	
Electric pole line and wire—Iroquois Falls	336 00	
Stock pens	20 51	
Telephones installed in section foremen's houses	209 66	
Cross-over—Mindoka	1,813 24	
Water service—North Bay	2,635 66	
Water supply—Temagami	783 68	
Water supply—New Liskeard	914 89	
Water service—Englehart	538 85	
Water supply—Matheson	106 65	
Water service—Elk Lake	1,727 77	
Water supply for fire protection—Iroquois Falls	3,145 25	
Machine tools—North Bay	14,442 34	
Additional section equipment	3,872 09	
Phantom Telephone Circuit—North Bay—Cobalt	742 64	
Telephone circuits—North Bay to Cobalt, etc.	117 99	
Telephone circuit—Cobalt to Porquis Junction	25,612 88	
Renewing pole line equipment—Englehart to Porquis Junction	3,006 80	
Metallic telephone circuits—Swastika to Kirkland Lake	1,683 42	
Telegraph circuit—Swastika to Kirkland Lake	502 34	
Land—New Liskeard	6,321 29	
		\$346,691 56

EQUIPMENT.

Alterations—eight locomotives	\$50,000 00	
Additional locomotives	383 24	
Freight cars destroyed and retired	11,188 34	Cr.
Betterments to passenger train cars	531 50	
Additional work equipment	453 74	
		\$40,180 14
		\$386,871 70

COMPARATIVE STATEMENT OF EARNINGS, EXPENDITURES AND RESULT OF OPERATION, NOVEMBER 1st, 1918, TO OCTOBER 31st, 1920.

Receipts	Nov. 1st, 1919, to Oct. 31st, 1920		Nov. 1st, 1918, to Oct 31st, 1919	
	\$ c.		\$ c.	
Revenue from Transportation....	3,923,700 78		3,012,925 13	
Incidental to Transportation	164,843 23		123,827 63	
Total Revenue	4,088,544 01		3,136,752 76	
Expenditures	Per Ct.	\$ c.	\$ c.	Per Ct.
Maintenance Way and Structures	19.9	813,763 46	789,431 65	25.2
Maintenance of Equipment	18.8	770,627 57	594,401 64	19
Traffic.....	.5	21,666 17	19,504 73	.6
Transportation	46.2	1,887,417 25	1,499,314 90	47.8
Miscellaneous Operations	1.5	61,927 43	51,167 33	1.6
General	3.3	133,328 85	123,460 28	3.9
Transportation for Investment—Cr. ....	.....	731 45	1,150 51	.....
Total Operating Expenses.	90.2	3,687,999 28	3,076,130 02	98.1
Balance .....	.....	400,544 73	60,622 74	.....
Other Income .....	.....	101,702 50 Dr.	7,469 42 Dr.	.....
Net result .....	.....	298,842 23	53,153 32	.....

COMPARATIVE STATEMENT SHOWING EARNINGS AND EXPENDITURES IN OPERATION
PERIOD 1905 TO 1920, INCLUSIVE.

Year.	Freight.	Passenger.	Other Revenue.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transportation Expenses.	Misc. Operations.	General Expenses.	Transportation for Investment.	Total Revenue.	Total Expenditures
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1905..	121,530 46	108,681 76	23,508 33	25,072 89	12,533 68	.....	88,342 41	.....	13,823 52	.....	253,720 55	139,772 50
1906..	230,552 63	254,759 33	58,706 89	77,265 87	46,382 65	.....	215,256 08	.....	23,194 61	.....	544,018 85	362,099 21
1907..	390,894 29	388,343 03	74,282 69	112,395 22	88,016 79	.....	412,160 52	.....	32,839 76	.....	853,520 01	645,412 29
1908..	471,203 41	366,504 53	135,357 67	125,563 43	119,563 01	12,499 96	405,907 58	.....	24,863 45	.....	973,065 61	688,397 43
1909..	756,141 66	483,110 89	121,972 33	191,170 18	107,078 96	9,789 99	436,768 41	.....	49,989 34	.....	1,361,224 88	794,796 88
1910..	852,886 46	606,967 91	131,997 65	380,314 75	137,340 46	14,920 04	556,740 45	.....	76,045 66	.....	1,591,852 02	1,165,361 36
1911..	974,678 33	653,063 01	153,223 49	353,918 92	164,145 69	17,705 31	567,316 97	.....	78,911 74	.....	1,780,964 83	1,181,998 63
1912..	929,464 66	599,681 73	178,303 68	346,964 01	249,683 22	17,461 22	676,963 33	.....	93,625 91	.....	1,707,450 07	1,384,697 69
1913..	906,476 16	576,049 37	173,629 32	430,820 04	242,633 93	16,857 36	680,480 08	.....	106,758 60	.....	1,656,154 85	1,477,550 01
1914..	952,090 35	544,820 08	173,988 44	408,046 15	284,935 87	18,872 65	651,687 20	.....	105,032 36	.....	1,670,898 87	1,468,574 23
1915..	925,735 37	482,349 80	143,466 60	325,865 86	262,654 51	18,135 13	625,911 92	.....	95,929 49	.....	1,551,551 77	1,328,496 91
1916..	1,320,569 33	624,808 12	192,744 50	349,024 48	248,702 04	22,465 69	842,058 75	42,562 89	91,317 74	1,954 13	2,138,121 95	1,594,177 46
1917..	1,459,459 93	655,127 58	217,318 28	419,266 84	305,286 86	17,676 10	985,452 19	47,824 69	107,255 05	1,465 44	2,331,905 79	1,881,296 29
1918..	1,937,054 80	647,162 91	228,092 91	462,526 51	485,057 18	19,376 52	1,260,079 27	52,651 90	111,097 85	586 63	2,812,310 62	2,390,202 60
1919..	2,036,274 38	853,363 52	247,114 86	789,431 65	594,401 64	19,504 73	1,499,314 90	51,167 33	123,460 28	1,150 51	3,136,752 76	3,076,130 02
1920..	2,728,092 92	1,021,079 95	339,371 14	813,763 46	770,627 57	21,666 17	1,887,417 25	61,927 43	133,328 85	731 45	4,088,544 01	3,687,999 28
	16,993,105 14	8,865,873 52	2,593,078 78	5,611,410 26	4,119,044 06	226,930 87	11,791,857 31	256,134 24	1,267,474 21	5,888 16	28,452,057 44	23,266,962 79

SUMMARY.

Freight Revenue.....	\$16,993,105 14	Maintenance of Way and Structures	\$5,611,410 26
Passenger Revenue.....	8,865,873 52	Maintenance of Equipment.....	4,119,044 06
Other Revenue.....	2,593 078 78	Traffic Expenses.....	226,930 87
		Transportation Expenses	11,791,857 31
		Miscellaneous Operations.....	256,134 24
		General Expenses.....	1,267,474 21
		Transportation for Investment—Cr.....	5,888 16
			<u>\$23,266,962 79</u>

Total Revenue from Transportation	\$28,452,057 44
Total Expenditures	<u>23,266,962 79</u>
Other Income, etc.....	\$5,185,094 65
	<u>631,989 81</u>
Paid Treasurer of Ontario.....	\$5,817,084 46
	<u>5,188,245 16</u>
Balance Profit and Loss.....	<u>\$628,839 30</u>

TRAFFIC AND MILEAGE STATISTICS.

PASSENGER TRAFFIC.

Total passengers carried earning revenue	609,879
Number of passengers carried one mile	36,535,694
Number of passengers carried one mile per mile of road	111,219
Average distance carried—miles	59.91
Total passenger revenue	\$1,021,079 95
Average amount received from each passenger	1 67
Average receipts per passenger per mile (cents) .....	.02.79
Total passenger train service revenue	1,168,475 36
Passenger service train revenue per mile of road	3,557 00
Passenger service train revenue per train mile	2 39

FREIGHT TRAFFIC.

Number of tons carried earning revenue	1,361,185
Number of tons carried earning revenue one mile	252,232,745
Number of tons carried earning revenue one mile per mile of road	767,831
Average distance haul of one ton—miles	185.3
Total freight revenue	2,728,092 92
Average amount received for each ton	2 00
Average amount received per ton per mile (cents) .....	.01.08
Freight revenue per mile of road	8,304 70
Freight revenue per train mile	3 95

TOTAL TRAFFIC.

Operating revenue	\$4,088,544 01
Operating revenue per mile of road	12,446 10
Operating revenue per train mile	3 31
Operating expenses	3,687,999 28
Operating expenses per mile of road	11,226 79
Operating expenses per train mile	2 99
Net operating revenue	400,544 73
Net operating revenue per mile of road	1,219 31

CAR MILEAGE.

Average number of passengers carried one mile per car mile.....	11.7
Average number of passengers carried one mile per train mile	74.96
Average number of passenger cars per train mile	6.41
Mileage of passenger cars	3,126,274
Mileage of loaded freight cars	11,253,995
Mileage of empty freight cars	4,426,821
Average number of freight cars per train mile	23.8
Average number of loaded freight cars per train mile	16.3
Average number of empty freight cars per train mile	6.4
Average number of tons freight per train mile	365.56
Average number of tons freight per loaded car mile	22.41
Average mileage operated during the year	328.5

TRAIN MILEAGE.

Mileage of revenue passenger trains	487,414
Mileage of revenue mixed trains	55,141
Mileage of revenue freight trains	689,995
Mileage of revenue special trains	1,100
Total revenue train mileage	1,233,650

FREIGHT TRAFFIC—COMPANY'S MATERIAL EXCLUDED—NOV. 1, 1919
TO OCT. 31, 1920.

Commodity.	Whole Tons
Products of Agriculture—	
Corn	9,219
Oats	14
Barley	35,871
Rye	2,166

Commodity.	Whole Tons
Products of Agriculture—<i>Con.</i>	
Other grain	2,161
Flour	18,947
Other mill products	3,887
Hay and straw	23,943
Apples, fresh	574
Other fruit, fresh	1,770
Potatoes	1,352
Other fresh vegetables	3,318
Other agricultural products	292
Products of Animals—	
Horses	3,917
Cattle and calves	18,182
Sheep	22
Hogs	43
Dressed meats, fresh	1,909
Dressed meats, cured or salted	47
Other packing-house products	466
Poultry	41
Eggs	120
Butter and cheese	103
Wool	75
Hides and leather	925
Other animal products	1,163
Products of Mines—	
Anthracite coal	19,836
Bituminous coal	180,377
Coke	1,169
Other ores and concentrates	11,887
Base bullion and matte	191
Clay, gravel, sand, etc.	41,496
Slate and dimension stone	39
Crude petroleum	2,784
Asphaltum	64
Salt	1,572
Other mine products	10,099
Products of Forest—	
Logs, posts, poles and cordwood	54,965
Ties	75,640
Pulpwood	329,159
Lumber, timber, shooks, etc.	160,555
Other forest products	18,997
Manufactures and Miscellaneous—	
Refined petroleum, etc.	4,776
Sugar	2,520
Iron, pig and bloom	763
Rails and fastenings	785
Bar and sheet iron, etc.	3,291
Castings, machinery and boilers	9,046
Cement	15,644
Brick and artificial stone	5,386
Lime and plaster	3,347
Sewer pipes and drain tiles	383
Agricultural implements, etc.	8,044
Automobiles and auto trucks	3,628
Household goods	4,085
Furniture	4,559
Beverages	2,461
Fertilizers, all kinds	55
Paper—printed matter and books	64,071
Wood pulp	84,496
Fish—fresh and frozen or cured	6,511
Canned meats	20
Other canned goods	978
Other manufactures and miscellaneous	34,693
Merchandise	62,286
	<hr/>
	1,361,185

STATISTICS

Comparative Passenger and Freight Traffic Statement.

	Passengers.	Revenue.
		\$ c.
Number of passengers carried during year 1905.....	86,648	108,681 76
“ “ “ “ 1906.....	359,861	254,759 33
“ “ “ “ 1907.....	518,678	388,343 03
“ “ “ “ 1908.....	479,005	366,504 53
“ “ “ “ 1909.....	580,748	483,110 89
“ “ “ “ 1910.....	670,913	606,967 91
“ “ “ “ 1911.....	479,102	653,063 01
“ “ “ “ 1912.....	497,452	599,681 73
“ “ “ “ 1913.....	508,055	576,049 37
“ “ “ “ 1914.....	535,869	544,820 08
“ “ “ “ 1915.....	480,995	482,349 80
“ “ “ “ 1916.....	485,759	624,808 12
“ “ “ “ 1917.....	499,759	655,127 58
“ “ “ “ 1918.....	436,984	647,162 91
“ “ “ “ 1919.....	525,714	853,363 52
“ “ “ “ 1920.....	609,879	1,021,079 95
Total	7,755,421	8,865,873 52

Number of passengers carried one mile, period 1905 to 1920, inclusive..... 357,994,046

	Tons.	Revenue.
		\$ c.
Number of tons of freight carried during year 1905 ...	99,192	121,530 46
“ “ “ “ “ 1906 ...	273,749	230,552 63
“ “ “ “ “ 1907 ...	393,589	390,894 29
“ “ “ “ “ 1908 ...	484,444	471,203 41
“ “ “ “ “ 1909 ...	498,645	756,141 66
“ “ “ “ “ 1910 ...	624,820	852,886 46
“ “ “ “ “ 1911 ...	564,120	974,678 33
“ “ “ “ “ 1912 ...	562,734	929,464 66
“ “ “ “ “ 1913 ...	674,942	906,476 16
“ “ “ “ “ 1914 ...	742,366	952,090 35
“ “ “ “ “ 1915 ...	676,938	925,735 37
“ “ “ “ “ 1916 ...	922,618	1,320,569 33
“ “ “ “ “ 1917 ...	960,714	1,459,459 93
“ “ “ “ “ 1918 ...	1,233,510	1,937,054 80
“ “ “ “ “ 1919 ...	1,068,775	2,036,274 38
“ “ “ “ “ 1920 ...	1,361,185	2,728,092 92
Total.....	11,142,341	16,993,105 14

Number of tons of freight carried one mile, period 1905 to 1920, inclusive..... 1,589,589,270

TONNAGE.

Statement of Tons One Mile—November 1st, 1919, to October 31st, 1920.

Month.	Gross Tonnage—Pounds			Whole Tons	Tons One Mile
	North Bound	South Bound	Total		
November 1919....	69,845,093	98,445,842	168,290,935	84,145	15,803,724
December "	47,834,589	120,056,308	167,890,897	83,945	15,904,716
January 1920....	56,512,901	127,536,247	184,049,148	92,025	15,985,732
February "	93,165,565	153,495,265	246,660,830	123,330	22,528,915
March "	90,547,286	158,524,188	249,071,474	124,536	21,514,572
April "	77,766,120	162,196,455	239,962,575	119,981	22,708,827
May "	76,025,781	162,796,749	238,822,530	119,411	21,794,108
June "	67,369,903	136,184,374	203,554,277	101,777	16,719,741
July "	72,454,047	153,321,625	225,775,672	112,888	20,871,466
August "	95,158,743	158,398,740	253,557,483	126,779	23,589,263
September "	91,393,256	176,445,357	267,838,613	133,919	27,991,225
October "	89,450,814	187,446,608	276,897,422	138,449	26,820,456
Total.....	927,524,098	1,794,847,758	2,722,371,856	1,361,185	252,232,745

PASSENGER TRAFFIC.

Statement of Passengers, Revenue, Passengers one Mile and Passenger Revenue per mile, from November 1st, 1919, to October 31st, 1920.

Form of Ticket.	Passengers.	Revenue.	Passengers One Mile.	Revenue per Passenger, One Mile.
		\$ c.		c.
Ordinary	545,033	896,369 45	30,890,764	.02.90
Commercial	34,918	81,191 73	3,077,828	.02.63
Excursion	17,073	33,953 87	1,995,955	.01.70
Militia	2,470	9,778 64	376,604	.02.59
Market	7,572	2,514 85	135,842	.01.85
Scholars.....	2,813	334 70	58,701	.00.57
	609,879	1,024,143 24	36,535,694	.02.80

TOWNSITES REPORT.

STATEMENT OF RECEIPTS—NOVEMBER 1ST, 1919, TO OCTOBER 31ST, 1920.

Received on Lots Sold during Year.

Temagami	\$100 00
Matheson	31 00
Cochrane	53 75
	\$184 75

Received on Lots Sold prior to November 1st, 1919.

Latchford	\$50 00
Cobalt	40 00
Englehart	476 11
Dane	48 75
Matheson	1,912 25
Monteith	20 00
Porquis Junction	60 50
Cochrane	267 16
	2,874 77

Interest Received on Deferred Payments.

Cobalt	\$14 78
Englehart	216 62
Dane	29 75
Matheson	344 65
Monteith	3 00
Porquis Junction	37 25
Cochrane	87 03
	\$733 08
Interest Received on bank deposits, less exchange.....	79 33
	\$3,871 93

TEMISKAMING AND NORTHERN ONTARIO RAILWAY

EXPENDITURE FOR FISCAL YEAR, 1920

Abitibi Power and Paper Co., Ltd., Montreal, Que., claims, etc.	\$1,008 35
Aboud, L., Haileybury, Ont., claim	17 00
Acer & Co., Ltd., J. H. A., Montreal, Que., claim	125 50
Acme Machinery Co., Cleveland, Ohio, material and supplies	73 75
Adam & Son, John, Collingwood, Ont., material and supplies	238 50
Adams and Westlake Co., Chicago, Ill., material and supplies	893 99
Advertiser Job Printing Co., Ltd., London, Ont., printing, etc.	837 00
Advocate Printing Co., North Bay, Ont., printing, etc.	27 75
Aikenhead Hardware Co., Ltd., Toronto, Ont., material and supplies.....	188 53
Air Brake Association, The, New York, N.Y., publication	5 00
Akron, Canton & Youngstown Railway, Akron, Ohio, car service	14 40
Alabama, Tennessee & Northern Railway, Mobile, Ala., car service and car repairs	74 89
Alabama & Vicksburg Railway, New Orleans, La., car service and car repairs	39 23
Alexander & Cable Lithographing Co., Ltd., Toronto, Ont., printing, etc...	356 74
Alexandro, S. O., Timmins, Ont., claim	224 50
Algoma Central & Hudson Bay Railway, Sault Ste. Marie, Ont., car service and car repairs	1,142 38
Algoma Eastern Railway, Sault Ste. Marie, Ont., car service and car repairs	233 16
Algoma Steel Corporation, Ltd., Sault Ste. Marie, Ont., material and supplies	111,358 66
Allen Manufacturing Co., Ltd., Toronto, Ont., laundry	177 77
Allworth, E. M., Timmins, Ont., contract, electric wiring, etc.	476 60
American Arch Co., New York, N.Y., material and supplies	354 00
American Association of General Baggage Agents, Toronto, Ont., membership fees	10 00
American Hoist and Derrick Co., St. Paul, Minn., material and supplies..	288 95
American Manufacturing Co., Brooklyn, New York City, claim	8 66
American Radiator Co. of Canada, Ltd., Brantford, Ont., material and supplies	99 77
American Railway Association, New York, N.Y., assessments, etc.	209 54
American Railway Engineering Association, Chicago, Ill., publication	10 50
American Railway Express Co., Chicago, Ill., car service	2 53
American Refrigerator Transit Co., St. Louis, Mo., car service	7 68
Anchor Packing Co. of Canada, Ltd., Montreal, Que., material and supplies..	52 53
Anderson & Co., Ltd., North Bay, Ont., claim	68 37
Anderson Manufacturing Co., Albert & J. M., Boston, Mass., material and supplies	33 10
Angle, W. B., New Liskeard, Ont., claim	4 60
Angus & Taylor, North Bay, Ont., material and supplies	16 50
Ann Arbor Railroad, Detroit, Mich., car service and car repairs	390 16
Anthony & Northern Railway Co., Hutchison, Kan., car repairs	32 12
Antoine, P., Timmins, Ont., claim	6 00
Anyan, H., Englehart, Ont., donation	200 00
Anyon, Wm., Englehart, Ont., award, Workmen's Compensation Board	29 13
Aquino, Tony, South Porcupine, Ont., claim	10 00
Archer, Harry A., North Bay, Ont., awards, Workmen's Compensation Board	335 38
Arizona Eastern Railroad Co., Tucson, Arizona, car repairs	29
Armstrong Bros. Tool Co., Chicago, Ill., material and supplies	36 61
Armstrong, Whitworth of Canada, Ltd., Montreal, Que., material and supplies	2,354 31
Art Metropole, The, Toronto, Ont., material and supplies	309 86
Ash, J. P., Cobalt, Ont., material and supplies	33 94
Ashton Valve Co., E. Cambridge, Mass., material and supplies	30 01
Astels, Helen, Gillies Depot, Ont., awards, Workmen's Compensation Board	335 00
Atcheson, A., Connaught, Ont., refund, deposit on siding, etc.	264 50
Atchison, Topeka & Santa Fe Railway, Topeka, Kansas, car service and car repairs	1,890 06
Atlanta, Birmingham & Atlantic Railway, Atlanta, Ga., car service and car repairs	29 98
Atlantic Coast Line Railroad, Wilmington, N.C., car service and car repairs	387 19
Atlantic Seaboard Despatch, Chicago, Ill., car service	5 16
Atlas Railway Supply Co., Chicago, Ill., material and supplies	30 00
Audet, E. J., Connaught, Ont., travelling expenses	237 00
Aumont, Jerry, Nushka, Ont., material and supplies	175 15

Aurora Metal Co., Inc., Aurora, Ill., material and supplies	\$759 56
Austin, Geo., Englehart, Ont., award, Workmen's Compensation Board ...	32 09
Bailey, John R., Thornloe, Ont., travelling expenses	17 95
Balfour, D. A., Toronto, Ont., material and supplies	48 00
Baltimore & Ohio Chicago Terminal Railroad, Chicago, Ill., car repairs...	11 78
Baltimore & Ohio Railway Co., Baltimore, Md., traffic balances and car repairs	3,721 69
Bank of Hochelaga, Cochrane, Ont., claim	15 35
Bank of Nova Scotia, returned drafts, interest, exchange, etc.	42,137 92
Bangor & Aroostook Railroad, Bangor, Maine, traffic balances	285 91
Banner & Ostrom, North Bay, Ont., supplies	270 11
Barber, Ellis, Limited, Toronto, Ont., material and supplies	52 31
Barker, J. J., Connaught, Ont., work performed	8,973 38
Barrett Company, Limited, The, Toronto, Ont., material and supplies	310 45
Barstead, Alfred, Earlton, Ont., material and supplies	321 30
Bartolotto, A., Creighton Mines, Ont., claim	10 00
Bastian, E. H., Shillington, Ont., claim	59
Bastow, T. P., Cochrane, Ont., claim	4 17
Battley, Chas., North Bay, Ont., travelling expenses	30 55
Bauldry, W. J., Cochrane, Ont., travelling expenses	14 60
Beamish & Smith, North Bay, Ont., material and supplies	9 16
Beardmore & Co., Toronto, Ont., material and supplies	17 58
Beardmore Belting Co., Ltd., Toronto, Ont., material and supplies	794 91
Beath, James, North Bay, Ont., travelling expenses	150 35
Beaver Board Companies, The, Buffalo, N.Y., claims	379 69
Bedford, H., Krugerdorf, Ont., material and supplies	20 00
Begg Brothers, North Bay, Ont., material and supplies	1,334 27
Begley, Wm., Matheson, Ont., claims	4 75
Belliveau, A., Cochrane, Ont., travelling expenses	21 40
Belliveau, J., Cochrane, Ont., travelling expenses	67 90
Bell Telephone Co. of Canada, telephone interchange balances, exchange and toll services, etc.	1,736 20
Bell, Robert, Cobalt, Ont., awards, Workmen's Compensation Board	43 09
Belt Railway Co. of Chicago, Chicago, Ill., car service and car repairs ...	10 28
Beneke, Peter, McCool, Ont., material and supplies	37 38
Bennett, O. E., Elk Lake, Ont., claim	3 00
Bentley, J. H., Clute, Ont., material and supplies	17 50
Berard, C., Englehart, Ont., travelling expenses	35 50
Bernstein, C., Englehart, Ont., claims	220 74
Bernstein & Lewis, Timmins, Ont., claims	1,612 34
Bertram & Sons, Ltd., John, Dundas, Ont., material and supplies	6,055 48
Bertram, T. H., North Bay, Ont., travelling expenses	26 05
Berndt, Henry, Cochrane, Ont., material and supplies	573 60
Bessemer & Lake Erie Railroad Co., Pittsburg, Pa., car service and car repairs	1,484 94
Best Printing Co., Ltd., T. H., Toronto, Ont., printing	171 50
Bethlehem Mines Corporation, Bethlehem, Pa., car service	2 84
Bingham, Thomas, North Bay, Ont., travelling expenses	13 75
Birch, E., Charlton, Ont., claim	74 50
Bird & Son, Hamilton, Ont., material and supplies	115 02
Bishop, Gordon R., North Bay, Ont., award, Workmen's Compensation Board	27 80
Bisson, A. T., Hoyle, Ont., refund deposit on siding	134 05
Bissonette, G. L., South Porcupine, Ont., material and supplies	6 06
Black Co., The T. H., Cobalt, Ont., material and supplies	1 18
Blanchard, E. W., Elk Lake, Ont., material and supplies	196 95
Blanchett, N. J., Latchford, Ont., travelling expenses	25 50
Blundell, J., North Bay, Ont., travelling expenses	5 65
Boast, R. G., North Bay, Ont., travelling expenses	122 30
Boeckh Company, Ltd., Toronto, Ont., material and supplies	762 65
Boivin, L., Cochrane, Ont., material and supplies	4 40
Boivin Tie and Lumber Co., Timmins, Ont., claim	20 20
Bosley Co., D. W., Chicago, Ill., material and supplies	36 00
Boss Lock Nut Company of Canada, Ltd., Montreal, Que., material and supplies	629 79
Boston & Albany Railroad, New York, N.Y., car service and car repairs ..	257 73
Boston & Maine Railroad, Boston, Mass., traffic balances and car repairs ..	509 25
Botts Marking Ink Co., Inc., Montreal, Que., material and supplies	68 78

Boucher, Arthur, Homer Siding, Ont., material and supplies	\$152 75
Boucher, N., Nushka, Ont., material and supplies	105 95
Bovin, A., South Porcupine, Ont., claim	11 10
Boyer, P. D., Haileybury, Ont., claims	58 66
Bradette & Belisle, Cochrane, Ont., claim	4 18
Brancadesano, P., Niagara Falls, Ont., unclaimed wages	2 00
Brandon, Dr. Edgar, North Bay, Ont., services	17 00
Brandram-Henderson, Limited, Toronto, Ont., material and supplies	1,180 76
Brantford Roofing Co., Ltd., Brantford, Ont., material and supplies	753 95
Brazeau, A., Timmins, Ont., work performed, etc.	2,032 91
Brenette, Geo., North Bay, Ont., awards, Workmen's Compensation Board.	210 04
Brent, Geo., Thornloe, Ont., material and supplies	24 25
Brewer, Geo. L., Cobalt, Ont., work performed	287 35
Brewster, L., Toronto, Ont., provisions	4 15
Brigginshaw, Wm. E., North Bay, Ont., awards, Workmen's Compensation Board	33 12
British Whig Publishing Co., Ltd., Kingston, Ont., printing	371 88
Brough, James, Mattagami Heights, Ont., work performed	1 75
Brough, J. S., Timmins, Ont., work performed	2 00
Brough & Rawlinson, Timmins, Ont., material and supplies	3 75
Brown & Co., Incorporated, Pittsburg, Pa., material and supplies	156 48
Brown, Alex., Orillia, Ont., claims	150 00
Brown, Arthur, Leeville, Ont., material and supplies	102 19
Brown, C. A., North Bay, Ont., travelling expenses	5 20
Brown, Geo., Leeville, Ont., material and supplies	123 40
Brown, Boggs Company, Ltd., Hamilton, Ont., material and supplies	34 29
Brunswick-Balke-Collender Co., Chicago, Ill., claim	15 75
Buckler, H., Cobalt, Ont., claim	6 14
Bucovetsky & Co., Timmins, Ont., claims	19 40
Buffalo Creek & Gauley Railway, Dundon, W. Va., car service	43 50
Buffalo, Rochester & Pittsburg Railway Co., Rochester, N.Y., car service and car repairs	2,021 42
Buffalo & Susquehanna Coal & Coke Co., Buffalo, N.Y., coal	331,473 70
Buffalo & Susquehanna Railroad Corporation, Buffalo, N.Y., traffic balances	11,290 75
Buker & Car Manufacturing Co., Rochester, N.Y., material and supplies	280 66
Bunnell & Co., J. H., New York, N.Y., material and supplies	109 48
Buntin, Gillies & Co., Ltd., Hamilton, Ont., material and supplies	1,731 72
Bunyan & Co., R., North Bay, Ont., material and supplies	2,412 92
Bureau of Explosives, New York, N.Y., assessments	180 24
Burke, F. M., Timmins, Ont., claim	2 34
Burke, H. C., Timmins, Ont., travelling expenses	20 90
Burroughs Adding Machine of Canada, Ltd., Toronto, Ont., material and supplies	25 13
Burrow, Stewart & Milne Co., Ltd., Hamilton, Ont., material and supplies ..	179 10
Burroughs Furniture Co., Ltd., F. C., Toronto, Ont., claim	47 10
Burt & Co., Ltd., F. N., Toronto, Ont., material and supplies	414 30
Bushing, C. W., Heaslip, Ont., material and supplies	26 25
Bush, John A., New Liskeard, Ont., claim	7 00
Butler County Oil Refining Co., Bruin, Pa., car service	5 16
Butte, Anaconda & Pacific Railway Co., Anaconda, Mont., car repairs	1 82
Butterfield & Co., Rock Island, Que., material and supplies	13 88
Cade, F. F., North Bay, Ont., travelling expenses	22 15
Cadieux, Wilfred, Montreal, Que., material and supplies	36 00
Cairns, Bernard, Toronto, Ont., material and supplies	50
Caldbick, Geo., Haileybury, Ont., fee for certificate	1 00
Caldwell & Company, E. R., Bradford, Pa., material and supplies	10 75
Caley, J. J., Englehart, Ont., travelling expenses	59 80
Cam-Fish Company, Limited, Toronto, Ont., material and supplies	10 85
Camb, Mrs. Frank, Earlton Junction, Ont., awards, Workmen's Compensation Board	232 90
Cambria & Indiana Railroad Company, Philadelphia, Pa., car service	111 00
Camel & Co., Chicago, Ill., material and supplies	20 52
Campbell, H. S., North Bay, Ont., material and supplies	8 13
Campbell, Wm., Cochrane, Ont., travelling expenses	20 55
Canada Cement Co., Ltd., Montreal, Que., material and supplies	10,646 30
Canada Grip Nut Co., Ltd., Montreal, Que., material and supplies	74 57
Canada Foundries & Forgings, Ltd., Brockville, Ont., material and supplies ..	123 46
Canada Machinery Corporation, Galt, Ont., material and supplies	1,690 83

Canada Metal Co., Ltd., Toronto, Ont., material and supplies	\$1,739 44
Canada Paint Co., Ltd., Montreal, Que., material and supplies	9,032 96
Canada Wire & Cable Company, Ltd., Toronto, Ont., material and supplies	18,906 93
Canadian Allis-Chalmers, Ltd., Toronto, Ont., material and supplies	170 00
Canadian Annual Review, Limited, Toronto, Ont., publication	6 08
Canadian Asbestos Co., Montreal, Que., material and supplies	837 61
Canadian Bag Co., Ltd., Montreal, Que., material and supplies	88 43
Canadian Bronze, Limited, Montreal, Que., material and supplies	14,137 10
Canadian Brotherhood Railway Employees, Halifax, N.S., advertising	15 00
Canadian Car & Foundry Co., Ltd., Montreal, Que., material and supplies	2,902 58
Canadian Car Service Bureau, Montreal, Que., proportion of expenses	691 62
Canadian Consolidated Felt Co., Ltd., Kitchener, Ont., material and supplies	22 05
Canadian Edge Tool Co., Galt, Ont., material and supplies	58 57
Canadian Express Co., North Bay, Ont., express charges	639 15
Canadian Fairbanks-Morse Co., Ltd., Toronto, Ont., material and supplies ..	3,947 36
Canadian Forestry Association, Ottawa, Ont., membership fees	2 00
Canadian Freight Association, Toronto, Ont., proportion of expenses	1,062 81
Canadian General Electric Co., Ltd., Toronto, Ont., material and supplies ..	3,851 69
Canadian Gold Car Heating & Lighting Co., Ltd., Montreal, Que., material and supplies	803 01
Canadian General Lumber Co., Limited, Toronto, Ont., claims	33 09
Canadian Independent Telephone Association, Toronto, Ont., membership fee ..	5 00
Canadian Ingersoll Rand Co., Ltd., Montreal, Que., material and supplies ..	51 20
Canadian Johns-Manville Company, Limited, Toronto, Ont., material and supplies	287 22
Canadian Link Belt Co., Ltd., Toronto, Ont., material and supplies	2 55
Canadian Locomotive Co., Ltd., Kingston, Ont., material and supplies	5,120 85
Canadian Manufacturers' Association, Toronto, Ont., publication	6 00
Canadian National Carbon Co., Ltd., Toronto, Ont., material and supplies ..	678 25
Canadian National Express Company, North Bay, Ont., express charges	82 58
Canadian National Railways—Canadian Northern, Toronto, Ont., traffic balances and car repairs, etc.	36,691 90
Canadian National Railways—C. G. R., Moncton, N.B., traffic balances and car repairs, etc.	31,443 53
Canadian Office Appliance & Supply Co., Toronto, Ont., material and supplies	164 00
Canadian Pacific Ocean Services, Montreal, Que., claim	43
Canadian Pacific Railway Co., Montreal, Que., traffic balances, car repairs, etc.	282,158 54
Canadian Pacific Railway Co.'s Telegraph, telegraph interchange balances and service	9,411 18
Canadian Passenger Association, Montreal, Que., proportion of expenses ..	304 05
Canadian Pipe Co., Ltd., Vancouver, B.C., material and supplies	2,262 22
Canadian Pneumatic Tool Co., Ltd., Montreal, Que., material and supplies ..	862 42
Canadian Railway & Marine World, Toronto, Ont., subscriptions	28 00
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont., material and supplies	16,599 22
Canadian Shovel & Tool Co., Ltd., Hamilton, Ont., material and supplies ..	767 14
Canadian Steel Tire & Wheel Co., Ltd., Montreal, Que., material and supplies	9,608 30
Canadian Steel Foundries, Ltd., Montreal, Que., material and supplies	17,651 64
Canadian Tie & Lumber Company, Limited, Toronto, Ont., claim	111 36
Canadian Westinghouse Co., Ltd., Hamilton, Ont., material and supplies	3,977 76
Canadian Wm. A. Rogers, Ltd., Toronto, Ont., material and supplies	18 00
Canadian Yale & Towne Co., Ltd., St. Catharines, Ont., material and supplies ..	356 35
Canuck Supply Co., Ltd., Montreal, Que., material and supplies	2,013 26
Carborundum Company, The, Niagara Falls, N.Y., material and supplies	71 56
Carey, Geo., Englehart, Ont., travelling expenses	2 50
Carey, William, Englehart, Ont., travelling expenses	139 98
Car Hire Bureau, Washington, D.C., car service	231 91
Caribonum Co., Ltd., Toronto, Ont., material and supplies	233 33
Carmichael, W. J., North Bay, Ont., travelling expenses	99 30
Carolina, Clinchfield & Ohio Railway, Johnson City, Tenn., car service and car repairs	95 51
Carter Drug & Stationery Company, Limited, Cochrane, Ont., claims	38 23
Carter, H., North Bay, Ont., travelling expenses	16 55
Carters Ink Co., Montreal, Que., material and supplies	393 58
Cartwright, Harvey, Charlton, Ont., material and supplies	118 55
Casey, M., Englehart, Ont., travelling expenses	2 00

Cassidy's Limited, Montreal, Que., claims	\$4 33
Catholic Register, Toronto, Ont., advertising	20 00
Causineau, James, North Bay, Ont., travelling expenses	3 90
Central California Traction Co., San Francisco, Cal., car repairs	1 82
Central Electric Co., Chicago, Ill., material and supplies	154 00
Central Indiana Railroad, Anderson, Ind., car service	13 20
Central New England Railway, New Haven, Conn., car service and car repairs	124 81
Central of Georgia Railway, Savannah, Ga., car service and car repairs ..	210 07
Central Railroad of New Jersey, New York, N.Y., car service and car repairs ..	793 37
Central Railway Signal Co., Pittsburg, Pa., material and supplies	1,966 00
Central Territory Freight Committee, Chicago, Ill., tariffs	151 55
Central Vermont Railway, St. Albans, Vt., car service and car repairs....	77 06
Central West Virginia & Southern Railroad, Ridgley, W. Va., car service ..	22 50
Chambers, Jacob E., Englehart, Ont., award, Workmen's Compensation Board	18 20
Chaweth, J. E., North Bay, Ont., travelling expenses	52 05
Champagne, W., Timmins, Ont., claim	11 50
Chapman Co., Charles, London, Ont., material and supplies	166 68
Charbonneau, Omer, Ramore, Ont., material and supplies	178 45
Charcoal Supply Co., Toronto, Ont., material and supplies	133 43
Charlebois, O. W., Iroquois Falls, Ont., material and supplies	3 26
Charleston & Western Carolina Railway Co., Wilmington, N.C., car service and car repairs	30 73
Charpentier, J., Barbara Bay, Ont., claim	10 80
Charpentier, M. A., Barbara Bay, Ont., claim	28 33
Chase & Co., L. C., Boston, Mass., material and supplies	1,236 65
Cherry, S. J., North Bay, Ont., work performed	47 90
Chesapeake & Ohio Railway, Richmond, Va., traffic balances, car repairs, etc.	6,487 44
Chicago & Alton Railroad Co., Chicago, Ill., traffic balances and car repairs ..	247 12
Chicago & Eastern Illinois Railroad, Chicago, Ill., traffic balances and car repairs	362 47
Chicago & Illinois Midland Railway Co., Taylorville, Ill., car service	90
Chicago & North Western Railway, Chicago, Ill., traffic balances, car repairs, etc.	1,639 20
Chicago, Burlington & Quincy Railroad, Chicago, Ill., traffic balances and car repairs	1,898 38
Chicago Flag & Decorating Co., Chicago, Ill., material and supplies.....	74 16
Chicago Great Western Railroad Co., Chicago, Ill., car service and car repairs ..	294 21
Chicago, Indianapolis & Louisville Railway, Chicago, Ill., traffic balances, car repairs, etc.	125 58
Chicago, Junction Railway, Chicago, Ill., car service.....	94 35
Chicago, Memphis & Gulf Railroad Company, Chicago, Ill., car service....	18
Chicago, Milwaukee & Gary Railroad Company, Rockford, Ill., car service.	215 10
Chicago, Milwaukee & St. Paul Railway, Chicago, Ill., traffic balances, car repairs, etc.	637 96
Chicago, New York & Boston Refrigerator Co., Chicago, Ill., car service....	65 03
Chicago, Peoria & St. Louis Railway, Chicago, Ill., car service and car repairs ..	30 88
Chicago, Rock Island & Gulf Railway, Fort Worth, Tex., car service and car repairs	19 20
Chicago, Rock Island & Pacific Railway Co., Chicago, Ill., traffic balances and car repairs	609 51
Chicago, St. Paul, Minneapolis & Omaha Railroad, St. Paul, Minn., traffic balances and car repairs	633 14
Chicago Switching Committee, Chicago, Ill., tariffs	37
Chicago, Terre Haute & Southwestern Railway, Chicago, Ill., car service and car repairs	218 44
Childerhose, J. D., Cobalt, Ont., claim	2 15
Childerhose, Wm. Burtle, South Porcupine, Ont., award Workmen's Compensation Board	39 28
Child's Hardware, Matheson, Ont., claims	18 22
Childs, Lloyd, North Cobalt, Ont., award, Workmen's Compensation Board.	26 79
Church, E., Englehart, Ont., work performed.....	18 00
Cicci, P., North Bay, Ont., work performed.....	1 65
Cincinnati, Indianapolis & Western Railway, Indianapolis, Ind., car service and car repairs	111 53
Cincinnati, New Orleans & Texas Railway Co., Cincinnati, Ohio, car service ..	45
Cincinnati Northern Railroad Company, Cincinnati, Ohio, car service.....	95 20

Clark, John, Englehart, Ont., claims	\$357 28
Clark, N., North Bay, Ont., travelling expenses.....	21 89
Clarke, W. E., Englehart, Ont., travelling expenses	53 06
Clay Products Agency, Ltd., Toronto, Ont., material and supplies	18 18
Clement, S. B., North Bay, Ont., expenses.....	333 07
Cleveland, Cincinnati, Chicago & St. Louis Railway, Cincinnati, Ohio, traffic balances, car repairs, etc.	1,207 41
Cleveland Copper Ferrule Co., Cleveland, Ohio, material and supplies.....	147 45
Cleveland Stone Co., Cleveland, Ohio, material and supplies.....	21 42
Clifton Porcupine Mines, Ltd., South Porcupine, Ont.; claim.....	16 40
Clontier, Arthur, Earleton, Ont., material and supplies.....	326 30
Clouthier & Company, L. P., Ville Marie, Que., claim	7 65
Coale Muffler & Safety Valve Company of Baltimore, Baltimore, Md., material and supplies	409 15
Cobalt Daily Nugget, Ltd., Cobalt, Ont., advertising.....	538 66
Cobalt Water Commission, Cobalt, Ont., water supplied.....	1 70
Cobourg Felt Company, Limited, The, Cobourg, Ont., material and supplies	63 13
Cochlin, T. E., Ramore, Ont., material and supplies.....	7 45
Cochrane Hardware, Ltd., North Bay, Ont., material and supplies.....	3,257 80
Cochrane Northland Post, Cochrane, Ont., advertising.....	17 70
Cochrane Steam Laundry Co., Cochrane, Ont., work performed.....	317 64
Cochrane Telephone Co., Ltd., Cochrane, Ont., telephone service.....	147 33
Cochrane Waterworks Dept., Town of, Cochrane, Ont., water supplied.....	620 92
Coe Manufacturing Co., W. H., Providence, R.I., material and supplies....	336 68
Coghlan, Fred., Widdifield, Ont., material and supplies.....	1,232 00
Coghlin Co., Ltd., J. B., Montreal, Que., material and supplies.....	796 36
Cohen, I., Montreal, Que., claim	10 00
Cole, A. A., Cobalt, Ont., travelling expenses, etc.....	136 07
Colorado Midland Railway Company, Denver, Col., car service....	16 20
Colorado Springs & Cripple Creek District Ry., Colorado Springs, Col., car service	14 40
Colorado & Southern Railway, Denver, Col., car service and car repairs....	121 21
Colorado & Wyoming Railway, Denver, Col., car repairs.....	3 80
Comrie, Wm., Cochrane, Ont., expenses	56 80
Coniagas Mines, Limited, Cobalt, Ont., claim	52 56
Conkey & Murphy, Haileybury, Ont., material and supplies	67 79
Conn, Rev. J. T., Markdale, Ont., travelling expenses.....	10 00
Connelly, Donald, Elk Lake, Ont., material and supplies.....	57 00
Cannon Company, John, Hamilton, Ont., material and supplies.....	163 52
Consolidated Car Heating Company, Albany, N.Y., material and supplies..	96 72
Consolidated Classification Committee, Chicago, Ill., publications.....	59 88
Conway, P. J., Iroquois Falls, Ont., claim.....	30 41
Coo, W. C., Toronto, Ont., typing.....	4 60
Cook, E. W., North Bay Junction, Ont., awards, Workmen's Compensation Board	85 80
Cook, Silas, North Cobalt, Ont., material and supplies.....	138 10
Cook, W. R., Krugersdorf, Ont., claim	1 36
Cook & Son, J. T., New Liskeard, Ont., claims, etc.....	18 81
Copeland Chatterton Co., Ltd., Brampton, Ont., material and supplies.....	105 84
Cosco, A., South Porcupine, Ont., claim	8 10
Cosco, O., South Porcupine, Ont., claim.....	8 28
Cote, Joseph, Kenabek, Ont., material and supplies.....	791 50
County of Carleton General Protestant Hospital, Ottawa, Ont., award, Workmen's Compensation Board	40 00
Cousineau, Max, Earleton Junction, Ont., material and supplies.....	69 54
Cowan and Company of Galt, Limited, Galt, Ont., material and supplies...	36 02
Cragg, F., Toronto, Ont., unclaimed wages	7 20
Cragg, Thos., Thornloe, Ont., material and supplies.....	413 00
Craig, John A., Vimy Ridge, Ont., donation.....	200 00
Crain Printers, Limited, Ottawa, Ont., material and supplies.....	394 09
Cramp, Arthur, North Bay, Ont., awards, Workmen's Compensation Board	45 66
Croghan, Jack, North Bay, Ont., travelling expenses.....	24 10
Crouse-Hinds Co. of Canada, Ltd., Toronto, Ont., material and supplies....	120 46
Crouthers, Geo., North Bay, Ont., material and supplies.....	8 64
Crown Reserve Mining Company, Cobalt, Ont., claim.....	52 06
Cumberland & Pennsylvania Railroad, Cumberland, Md., car service.....	124 20
Cumberland Valley Railroad, Chambersburg, Pa., car repairs.....	26 92
Cushman Chuck Co., The, Hartford, Conn., material and supplies.....	94 17
Cuthbert, Herman, Callander, Ont., awards, Workmen's Compensation Board	535 20

Dabous, N. S., Cobalt, Ont., claim	\$49 33
Daeran, Leo, Earlington, Ont., award, Workmen's Compensation Board.....	21 34
Dagenais, W. J., North Cobalt, Ont., claims.....	15 96
Dalton & Cunningham, South Porcupine, Ont., work performed.....	31 00
Dalton's Livery, Timmins, Ont., work performed.....	6 00
Daly, John, Feronia, Ont., claim.....	2 30
Dalzell, William, Cobalt, Ont., claim.....	5 10
Danaher, William, North Bay, Ont., travelling expenses.....	52 35
Davide, Edward, Connaught Station, Ont., material and supplies.....	109 65
Davidson Gold Mines, Limited, South Porcupine, Ont., claim.....	17 40
Davie Brothers, Earlington Jct., Ont., material and supplies.....	396 08
Davie, George, Leeville, Ont., material and supplies.....	71 90
Davis, Sam, North Bay, Ont., travelling expenses.....	11 45
Davis Boring Tool Company, Inc., St. Louis, Mo., material and supplies....	1,731 74
Davis Bournonville Company, Toronto, Ont., material and supplies.....	76 60
Davis & Henderson, Limited, Toronto, Ont., material and supplies.....	652 67
Dawson, Limited, Charles F., Montreal, Que., material and supplies.....	15 00
Day, H., North Bay, Ont., travelling expenses.....	263 30
Daymant, W. M., Englehart, Ont., material and supplies.....	3 50
Dayton Manufacturing Company, Dayton, Ohio, material and supplies....	19 20
Deacon, D., South Porcupine, Ont., claims.....	8 64
Defiance Check Writer Corporation, Rochester, N.Y., material and supplies	4 74
De Forge, Louis, Monteith, Ont., donation	50 00
Delaney & Pettit Company, Limited, Toronto, Ont., material and supplies..	382 08
De Laval Company, Limited, Peterborough, Ont., work performed.....	54 05
Delaware and Hudson Company, New York, N.Y., traffic balances and car repairs	1,818 16
Delaware, Lackawanna & Western Coal Co., Buffalo, N.Y., coal.....	3,041 51
Delaware, Lackawanna & Western Railroad, New York, N.Y., traffic balances and car repairs	3,494 90
Delbridge Company, The, St. Louis, Mo., publications.....	20 00
Delisla, E., Iroquois Falls, Ont., work performed.....	2 10
Delmonto, T., North Cobalt, Ont., claim.....	11 93
Delray Connecting Railroad Company, Detroit, Mich., car repairs.....	6 94
Denevitch, Ephrium, Redwater, Ont., awards, Workmen's Compensation Board	68 82
Denver & Rio Grande Railroad Company, Denver, Col., traffic balances and car repairs	273 16
Denver & Salt Lake Railroad Company, Denver, Col., car service and car repairs	40 14
De Queen & Eastern Railroad Company, De Queen, Ark., car repairs.....	11 62
Derosa, S., North Bay, Ont., work performed.....	2,722 66
Department of Inland Revenue, Ottawa, Ont., war tax collections.....	13,455 53
Department of Public Printing & Stationery, Ottawa, Ont., subscriptions, etc.	12 80
Department of Soldiers' Civil Re-Establishment, Guelph, Ont., material and supplies	378 00
Derway, R., Timmins, Ont., claim	3 00
Desilets, J., North Bay, Ont., travelling expenses.....	1 15
Desjardins, H., Feronia, Ont., material and supplies.....	236 00
Des Moines Union Railway Company, Des Moines, Iowa, car repairs.....	21 07
Despatch & Tribune, North Bay, Ont., advertising, etc.....	31 70
Desrochers, J. J., Haileybury, Ont., material and supplies.....	50 00
Detroit Lubricator Company, Walkerville, Ont., material and supplies....	62 89
Detroit Terminal Railroad, Detroit, Mich., car repairs.....	2 86
Detroit Toledo & Ironton Railway, Detroit, Mich., car service and car repairs	159 54
Detroit & Mackinac Railway Co., Detroit, Mich., car service and car repairs	30 60
Detroit & Toledo Shore Line Railroad, Toledo, Ohio, freight balances.....	791 54
Deveau, Jeffrey, Elk Lake, Ont., material and supplies.....	282 05
Dewart, Maw, Hodgson & McDonnell, Toronto, Ont., claim.....	25 00
Dickson, G. H., North Bay, Ont., travelling expenses.....	11 60
Dickson Creek Silver Mines, Haileybury, Ont., claim.....	7 77
Dietz Company, R. E., New York, N.Y., material and supplies.....	73 25
Dipaolo, R., Schumacher, Ont., work performed.....	2,954 88
Disston & Sons, Limited, Henry, Toronto, Ont., material and supplies....	42 17
Dodge Manufacturing Co., Ltd., Toronto, Ont., material and supplies.....	451 92
Doig & Company, James, Latchford, Ont., claims.....	22 18
Dome Mines Co., Limited, Toronto, Ont., claims.....	94 20

Dominion of Canada Guarantee & Accident Insurance Company, Toronto, Ont., ticket sales	\$12 38
Dominion Association of Fire Chiefs, Kingston, Ont., advertising.....	15 00
Dominion Atlantic Railway Company, Kentville, N.S., car service.....	10 20
Dominion Brake Shoe Company, Ltd., Montreal, Que., material and supplies	3,800 10
Dominion Bridge Company, Limited, Montreal, Que., claim.....	925 98
Dominion Envelope Co., Ltd., Toronto, Ont., material and supplies.....	1,265 94
Dominion Express Co., North Bay, Ont., express charges.....	576 34
Dominion Foundries & Steel, Limited, Hamilton, Ont., material and supplies	2,912 71
Dominion Glass Company, Limited, Montreal, Que., material and supplies..	373 60
Dominion Linens, Limited, Peterborough, Ont., material and supplies.....	265 40
Dominion Linseed Oil Company, Limited, Baden, Ont., material and supplies	333 98
Dominion Loose Leaf Company, Limited, Ottawa, Ont., material and supplies	306 26
Dominion Radiator Company, Limited, Toronto, Ont., material and supplies	180 23
Dominion Reduction Company, Limited, Cobalt, Ont., claims.....	129 77
Dominion Rubber System, Limited, Toronto, Ont., material and supplies....	3,487 30
Dominion Safety Device Co., Hamilton, Ont., material and supplies.....	67 13
Dominion Wadding Co., Ltd., Montreal, Que., material and supplies.....	15 91
Dominion Wheel & Foundries, Limited, Toronto, Ont., material and supplies	91,800 70
Donaldson & Son, Robert, Montreal, Que., material and supplies.....	262 50
Dorchester Co., Ltd., Mackanick, Que., claim.....	68 50
Dorney, F., New Liskeard, Ont., claim	10 00
Dougall Varnish Company, Limited, Montreal, Que., material and supplies..	823 90
Douglas, M. B., North Bay, Ont., travelling expenses.....	28 45
Drake, Mrs. Florence, Swindon, Wiltshire, Eng., awards, Workmen's Compensation Board	267 67
Drake, S. W., Cochrane, Ont., travelling expenses.....	2 00
Drew, James S., Cobalt, Ont., work performed.....	1 00
Drew, Thomas F., Cobalt, Ont., work performed.....	1 50
Drinkwater, J., North Bay, Ont., travelling expenses.....	68 40
Drouin, Louis, North Bay, Ont., travelling expenses.....	1 75
Drummond, McCall & Co., Limited, Montreal, Que., material and supplies..	3,739 25
Dudley, A. Chester, Larder Lake, Ont., claim.....	3 50
Duffett, Frederick, Heaslip, Ont., material and supplies.....	51 05
Duluth & Iron Range Railroad, Duluth, Minn., car service.....	1 80
Duluth, South Shore & Atlantic Railway Co., Marquette, Mich., traffic balances and car repairs.....	148 86
Duluth, Winnipeg & Pacific Railway, Toronto, Ont., car service and car repairs	408 43
Duncan, Frank W., North Bay, Ont., material and supplies.....	1,350 00
Duner Company, Chicago, Ill., material and supplies.....	18 47
Dunlop Tire and Rubber Goods Company, Limited, Toronto, Ont., material and supplies	874 15
Dunne, J. A., Thornloe, Ont., claims	120 74
Dunnett Company, B. W., Ottawa, Ont., claim.....	59 89
Dupuis, Freres, North Temiskaming, Ont., claim.....	2 34
Earl, Geo., North Bay, Ont., travelling expenses.....	204 05
Eastern Canadian Passenger Association, Montreal, Que., proportion of expenses	20 00
Eastern Freight Tariff Bureau, New York, N.Y., tariffs.....	58 50
Eaton, William, Cochrane, Ont., awards, Workmen's Compensation Board..	419 31
Eaton Company, Ltd., The T., Toronto, Ont., material and supplies	630 02
Eby-Blain Watson Co., Ltd., New Liskeard, Ont., claims.....	35 89
"Echoes," Toronto, Ont., advertising	25 00
Eddy Company, Ltd., E. B., Hull, Que., material and supplies.....	1,551 71
Edmonton, Dunvegan & British Columbia Ry., Edmonton, Alta., car service, etc.	28 28
Edwards, A., North Bay, Ont., travelling expenses.....	333 75
Edwards Agency, H. M., New Liskeard, Ont., claims.....	11 64
Edwards, Morgan & Co., Toronto, Ont., services rendered.....	547 25
Electric Planing Mill, North Bay, Ont., material and supplies.....	280 00
Electric Railway Journal, New York, N.Y., subscriptions	5 50
Electric Short Line Railway Company, Minneapolis, Minn., car service....	1 30
Electric Supply Company, North Bay, Ont., material and supplies.....	62 63
Electrical Systems, Limited, Toronto, Ont., material and supplies.....	85 53
Elgin, Joliet & Eastern Railway Co., Chicago, Ill., traffic balances and car repairs	874 16
Elias & Brother, G., Inc., Buffalo, N.Y., material and supplies.....	165 92

Elk Fire Brick Company of Canada, Limited, Hamilton, Ont., material and supplies	\$10 10
Elk Lake Hardware Company, Elk Lake, Ont., material and supplies.....	50
Elk Lake Power Company, Limited, Elk Lake, Ont., current supplied.....	286 78
Elkhorn Piney Coal Mining Co., Milwaukee, Wis., car service.....	9 90
Elkins & Sinclair, Haileybury, Ont., material and supplies.....	71 85
Elliot, J. J., Heaslip, Ont., material and supplies.....	133 50
El Paso & South Western System, New York, N.Y., car service and car repairs	59 84
Empire Manufacturing Company, Limited, Toronto, Ont., claim.....	22 60
Engineering & Machine Works of Canada, Ltd., St. Catharines, Ont., material and supplies	1,750 00
England Brothers, New Liskeard, Ont., claims.....	60 00
Englehart, J. L., Toronto, Ont., remuneration as chairman.....	2,083 34
Englehart, Town of, Englehart, Ont., water supplied.....	1,542 60
Englehart & District Agricultural Society, Englehart, Ont., donations....	35 00
English, William, North Bay, Ont., travelling expenses.....	459 92
Eplett, S. D., New Liskeard, Ont., claims.....	24 47
Erie & Michigan Railway & Navigation Company, Chicago, Ill., car service	27 90
Erie Railroad Company, New York, N.Y., traffic balances and car repairs..	1,847 72
Essex Terminal Railway, Walkerville, Ont., claim.....	2 93
Evans, Dr. Austin, Toronto, Ont., services rendered.....	16 00
Evans, Dr. Donald T., Cochrane, Ont., services rendered.....	23 60
Evansville & Indianapolis Railroad, Terre Haute, Ind., car service.....	15 30
Evening Telegram, Toronto, Ont., advertising.....	17 04
Eydt, J., Cobalt, Ont., work performed.....	4 20
Faessler Manufacturing Co., J., Moberly, Missouri, material and supplies..	27 20
Fairmont Gas Engine & Motor Car Company, Fairmont, Minn., material and supplies	1,297 78
Farmer, Mrs. Caroline A., Rutherglen, Ont., awards, Workmen's Compensation Board	409 83
Favreau, Geo., Otter, Ont., award, Workmen's Compensation Board.....	17 72
Fay & Egan Co., J. A., Cincinnati, Ohio, material and supplies.....	48 5
Feldman, F., Timmins, Ont., claim	1 12
Feldman Bros., Schumacher, Ont., material and supplies.....	3 50
Ferguson, C. L., North Bay, Ont., pay rolls, etc.	2,607,945 02
Ferguson, William, Heaslip, Ont., material and supplies.....	33 50
Fesserton Timber Co., Ltd., Toronto, Ont., claim.....	12 65
Filippeli, Eugenio, Tomiko, Ont., award, Workmen's Compensation Board.	26 34
Findlay, Fred., Matheson, Ont., material and supplies.....	645 36
Fleming, Dr. D., New Liskeard, Ont., claims.....	23 90
Florida East Coast Railway, St. Augustine, Fla., car service and car repairs	17 91
Foley, Rieger Pulp & Paper Co., Limited, Thorold, Ont., claim.....	92 49
Forstell, R. J., Toronto, Ont., claim	50 00
Fort Dodge, Des Moines & Southern Railroad Co., Boone, Ia., car service..	75 30
Fort Smith & Western Railroad, Fort Smith, Arkansas, car service and car repairs	42 12
Fort Worth & Denver City Railway Company, Fort Worth, Texas, car service and car repairs	119 98
Foster, F., Cochrane, Ont., material and supplies.....	22 50
Franklin Railway Supply Company of Canada, Limited, Montreal, Que., material and supplies	58 60
Franklin Railway Supply Company, New York, N.Y., material and supplies	13 60
Fraser, A., Charlton, Ont., work performed.....	42 00
Fraser, A. A., North Bay, Ont., travelling expenses.....	362 45
Fraser's Scottish Annual, Toronto, Ont., advertising.....	150 00
Freeman, A., North Bay, Ont., expenses, etc.....	65 20
Freeman, A. R., Timmins, Ont., claim.....	10 62
Freight & Express Underwriters, Toronto, Ont., claim.....	3 12
Frisco Refrigerator Line, St. Louis, Mo., car service.....	7 84
Frost Steel & Wire Company, Limited, Hamilton, Ont., material and supplies	919 89
Frothingham & Workman, Limited, Montreal, Que., material and supplies.	988 49
Fruit Growers' Express, Inc., Chicago, Ill., car service.....	5 16
Frumkin Bros., South Porcupine, Ont., claim.....	50
Funnell, Henry, Rose Grove, Ont., material and supplies.....	11 75
Gadbury, Trefle, Ramore, Ont., material and supplies.....	111 75
Gage & Company, Limited, W. J., Toronto, Ont., material and supplies....	94 87
Gagnon, Dr. L., Haileybury, Ont., claim.....	13 34

Galena Signal Oil Company, Toronto, Ont., material and supplies.....	\$11,953 50
Gallagher, Chas. W., South Porcupine, Ont., services rendered.....	57 60
Galveston, Harrisburg & San Antonio Ry. Co., Houston, Texas, car repairs	16 10
Galveston Wharf Co., Galveston, Texas, car repairs.....	10 56
Gamble Robinson North Bay, Limited, North Bay, Ont., claims.....	376 86
Gardiner, Benjamin F., Thornloe, Ont., claim.....	16 75
Gardiner, E. C., Thornloe, Ont., material and supplies.....	44 10
Garlock Packing Company, Hamilton, Ont., material and supplies.....	456 68
Garlock Walker Machinery Company, Ltd., Toronto, Ont., material and supplies	94 94
Gardner, Wm. R., Cochrane, Ont., work performed.....	24 00
Garneau, A., Ramore, Ont., claim	13 00
Gartshore, J. J., Toronto, Ont., claims.....	47 32
Gartshore, Thomson Pipe & Foundry Co., Ltd., Hamilton, Ont., material and supplies	2,459 64
Gauthier, P., Matheson, Ont., material and supplies	56 25
Gauvin, J., Cobalt, Ont., claim	30 00
Gazette Printing Company, Montreal, Que., printing	439 30
Gedney, W., North Bay, Ont., material and supplies.....	4 07
General Supply Company of Canada, Limited, Ottawa, Ont., material and supplies	4,302 01
Georgia & Florida Railway, Augusta, Ga., car service and car repairs.....	4 08
Georgia, Florida & Alabama Railway Co., Bainbridge, Ga., car service.....	6 30
Georgia Railroad, Augusta, Ga., car service and car repairs.....	48 90
Georgia Southern & Florida Railway Co., Macon, Ga., car service and car repairs	26 51
Georgia Southwestern & Gulf Railroad, Albany, Ga., car repairs.....	25 21
Gerbasi, F., North Bay, Ont., travelling expenses.....	20 70
Gerow, Mrs. R., Haileybury, Ont., work performed.....	8 00
Gibson, F. R., Haileybury, Ont., work performed.....	1,447 30
Gibson, Robert, Kenabeek, Ont., material and supplies.....	254 10
Gifford-Wood Company, Hudson, N.Y., material and supplies.....	34 93
Gigg, William, North Bay, Ont., travelling expenses.....	21 60
Giles, Chas. S., Cochrane, Ont., work performed.....	119 90
Gill & Long, Toronto, Ont., taxi service.....	5 00
Glenn, J. H., Atlanta, Ga., tariffs.....	26 02
Globe Printing Company, Toronto, Ont., advertising.....	129 79
Golding, A. W., Clute P.O., Ont., material and supplies.....	205 69
Gooch, Sidney, Porquis, Ont., material and supplies.....	232 55
Goodman, E. M., New Liskeard, Ont., commission, etc.....	100 90
Gordon, Mrs. J. R., Toronto, Ont., claim.....	8 60
Gordon, J. R., Timmins, Ont., material and supplies.....	1 43
Gordon & Co., Limited, Geo., Cache Bay, Ont., material and supplies	3,057 25
Gourock Ropework Export Co., Ltd., Montreal, Que., material and supplies	331 61
Gracey, T. J., Toronto, Ont., travelling expenses	196 65
Graham, R. P., Cobalt, Ont., claims	2 75
Graham, W. A., North Bay, Ont., travelling expenses	102 16
Graham Nail Works, Toronto, Ont., material and supplies	2,394 74
Grand & Toy, Limited, Toronto, Ont., material and supplies	613 60
Grand Rapids & Indiana Railway, Grand Rapids, Mich., car service and car repairs	47 27
Grand River Railway, Galt, Ont., traffic balances	71 52
Grand Trunk Lines in New England, Portland, Maine, car service and car repairs	109 34
Grand Trunk Pacific Railway, Montreal, Que., traffic balances and car repairs	21,432 69
Grand Trunk Pacific Coast Steamship Co., Limited, Vancouver, B.C., claims..	26 31
Grand Trunk Railway System, Montreal, Que., traffic balances and car repairs, etc.	51,575 80
Grand Trunk Western Lines Railroad, Detroit, Mich., traffic balances and car repairs	8,395 84
Grant & Kennedy, New Liskeard, Ont., land	3,200 00
Green Bay & Western Railroad Company, Green Bay, Wis., car service and car repairs	65 30
Greening Wire Company, Limited, Hamilton, Ont., material and supplies ...	1,620 07
Greenwood & Sons, S., New Liskeard, Ont., claims	55 65
Great North-Western Telegraph Company, Toronto, Ont., telegraph service ..	139 95
Great Northern Railroad, St. Paul, Minn., car service and car repairs	1,654 83
Great War Veterans' Association, Iroquois Falls, Ont., claim	14 30

Greer, J. N., Cochrane, Ont., services rendered	\$100 00
Grieve, John, Cochrane, Ont., travelling expenses	55 90
Griffin, W. A., North Bay, Ont., travelling expenses	192 53
Grills & Thompson, New Liskeard, Ont., claims	13 97
Groulx, James L., Cochrane, Ont., claims	10 00
Guertin, Mrs. May F., North Bay, Ont., award, Workmen's Compensation Board	200 00
Gulf & Ship Island Railroad Co., Gulfport, Miss., car service and car repairs	29 44
Gulf, Mobile and Northern Railroad Company, Mobile, Ala., car service and car repairs	17 36
Gurney Foundry Company, Limited, Toronto, Ont., material and supplies	296 63
Gustin Bacon Manufacturing Co., Kansas City, Mo., material and supplies ..	35 00
Gutta Percha & Rubber, Ltd., Toronto, Ont., material and supplies	2,594 62
Haggard & Marcusson Company, Chicago, Ill., material and supplies	293 83
Haileybury Supply Store, Haileybury, Ont., claim	5 95
Halcombe Brothers, Monteith, Ont., material and supplies	23 45
Hall, Limited, Adam, Peterborough, Ont., material and supplies	347 66
Halliday, Dugald, Leeville, Ont., material and supplies	330 80
Halliday, E., Leeville, Ont., material and supplies	216 85
Ham, C. H., Englehart, Ont., claims	10 00
Hamilton Bridge Works Company, Limited, Hamilton, Ont., material and supplies	312 01
Hamilton, Elsworth, Heaslip, Ont., award, Workmen's Compensation Board	28 67
Hamilton's Livery, Timmins, Ont., material and supplies	4 50
Hamilton Stamp & Stencil Works, Limited, Hamilton, Ont., material and supplies	259 36
Hardwicke, C. E., Cochrane, Ont., travelling expenses	36 00
Hargreaves, E., Haileybury, Ont., material and supplies	3,301 20
Harris Abattoir Co., Limited, Toronto, Ont., claims	14 88
Harris Tie & Timber Co., Limited, Ottawa, Ont., material and supplies	121 08
Harrison, Edward, South Porcupine, Ont., material and supplies	9 75
Harrison & Sons, Company, Limited, John, Owen Sound, Ont., material and supplies	380 00
Hart-Otis Car Company, Montreal, Que., material and supplies	52 24
Hartley, L., North Bay, Ont., travelling expenses	29 80
Hartzke, Frank, Leeville, Ont., material and supplies	1,075 40
Hartzke, Max, Cane, Ont., material and supplies	276 10
Harvey, Jos., Cobalt, Ont., donation	60 00
Haskin, S. J., North Bay, Ont., travelling expenses	25 20
Hawkesbury Lumber Company, Limited, Nesto, Ont., telephone refund	6 65
Hayes Track Appliance Co., Richmond, Ind., material and supplies	306 00
Heaslip, Amos., Heaslip, Ont., material and supplies	59 95
Heaslip, Elmer S., Heaslip, Ont., material and supplies	55 40
Heasman, Frank, New Liskeard, Ont., claims	5 33
Heaton's Agency, Toronto, Ont., publications	2 00
Hees & Son, Co., Limited, Geo. H., Toronto, Ont., material and supplies	276 55
Heinz Co., Limited, H. J., Toronto, claim	10 51
Hemphill, T. G., Wroxeter, Ont., claim	95 38
Henderson, G. A., Cochrane, Ont., work performed	8 40
Hendry & Reynolds, New Liskeard, Ont., claims	20 31
Hendun Lumber Co., Ltd., Haileybury, Ont., material and supplies	4,788 37
Hepburn, Limited, John T., Toronto, Ont., material and supplies	18 32
Herald Printing Company, Ltd., Hamilton, Ont., advertising	20 00
Herbert, Arthur, Homer, Ont., material and supplies	109 80
Herbert, A. L., Haileybury, Ont., claims	6 40
Herbert Morris Crane and Hoist Company, Ltd., Toronto, Ont., material and supplies	1,829 69
Herray Chemical Co., of Canada, Limited, St. Basile, Que., material and supplies	16 69
Hersey Company, Limited, Milton, Montreal, Que., services rendered	25 00
Hicks, Company, Harry, Toronto, Ont., work performed	2 50
Higgins & Burke, Toronto, Ont., claim	1 65
Hill, James, Haileybury, Ont., claim	10 00
Hoard, F. H., Haileybury, Ont., claim	10 00
Hobson & Carter, Bros., Cochrane, Ont., material and supplies	40 09
Hocking Valley Railway, Columbus, Ohio, traffic balances and car repairs ..	1,334 52
Hodgins, A., Leeville, Ont., material and supplies	125 17

Holden Company, Limited, Montreal, Que., material and supplies	\$13,724 35
Hollinger Gold Mines, Limited, Porcupine, Ont., claims	1,098 18
Hollinger Stores, Limited, Timmins, Ont., claim	9 54
Hollingshead, F. P., Charlton, Ont., claim	4 00
Hosken, A., Englehart, Ont., work performed	16 00
Hotel Cecil, Earlton, Ont., materials and supplies	3 00
Hotel Red Book Co., Limited, Toronto, Ont., advertisement	25 00
Houde, Jos., Ramore, Ont., claim	12 05
Houle, Leopold, Haileybury, claim	10 00
Houston East and West Texas Railway Co., Houston, Texas, car repairs...	3 39
Houston & Texas Central Railway, Houston, Texas, car repairs.....	34 70
Howie, R. G., Milberta, Ont., claims	91 20
Howse, J. A., Timmins, Ont., claims	38 83
Hudson Bay Knitting Co., Limited, Montreal, Que., material and supplies..	7 35
Hudson's Bay Company, North Bay, Ont., material and supplies	545 60
Hudson & Orsali, Ltd., Montreal, Que., claim	75
Hull, Harry, Timmins, Ont., travelling expenses	9 50
Hunt & Co., Ltd., Robert W., Montreal, Que., services rendered	2,043 19
Huntingdon & Broad Top Mountain Railroad & Coal Company, Huntingdon, Pa., car service	21 60
Huntington, R. S., North Bay, Ont., travelling expenses	2 70
Huston, Mr. and Mrs. John, Trout Mills, Ont., work performed	20 00
Hutt, F. W., Haileybury, Ont., claim	4 00
Hydro-Electric Power Commission, North Bay, Ont., power supplied, etc....	5,368 42
Ideal Face Shield Company, Columbus, Ohio, material and supplies.....	9 31
Illinois Central Railroad, Chicago, Ill., traffic balances and car repairs	5,965 19
Illinois Southern Railway Company, St. Louis, Mo., car service and car repairs.....	4 50
Imbeault, E., North Bay, Ont., travelling expenses	26 50
Imperial Oil, Ltd., Toronto, Ont., material and supplies, rent, etc.....	16,110 24
Indiana Harbor Belt Railroad, Cleveland, Ohio, traffic balances and car repairs.....	298 64
Industrial Works, Bay City, Mich., material and supplies	1,075 98
Inglis Co., Limited, John, Toronto, Ont., material and supplies	22 50
International & Great Northern Railroad, Palestine, Tex., car service and car repairs	128 58
International Railway Publishing Co., Ltd., Montreal, Que., advertisements.	126 50
International Seal & Lock Company, Hastings, Mich., material and supplies	322 66
International Bottling Works, North Cobalt, Ont., claims	201 20
International Business Machines Co., Limited, Toronto, Ont., material and supplies.....	50 29
International Harvester Co. of Canada, Limited, Chicago, Ill., claims	11 13
International Equipment Co., Limited, Montreal, Que., work performed ...	275 00
International Malleable Iron Co., Limited, Guelph, Ont., material and supplies	281 87
International Nickel Company of Canada, Limited, Copper Cliff, Ont., material and supplies	20 00
Interstate Railroad Company, Big Stone Gap, Va., car service and car repairs	8 26
Interstate Tank Car Corporation, New York, N.Y., car service	2 53
Ireland, M. S., Englehart, Ont., work performed	1 50
Irish & Maulson, Limited, Toronto, Ont., premiums	19,839 47
Iron Trade Review, Cleveland, Ohio, subscription	7 50
Iroquois Falls Merchandising Co., Limited, Iroquois Falls, Ont., claims....	215 05
Irvine, J. A., Kirkland Lake, Ont., claim	28 00
Jackson, Dr. Gordon F., Haileybury, Ont., material and supplies	5 50
Jackson, Isaac Abe, Englehart Station, Ont., awards, Workmen's Compensa- tion Board	952 06
Jackson, T., North Bay, Ont., travelling expenses	5 90
Jackson Press, The, Kingston, Ont., printing	7,992 05
Jacobi & Company, Don H., Haileybury, Ont., claim	39 20
Jaeger, Julius T., Iroquois Falls, Ont., claim	11 42
Jago, John, North Bay, Ont., claim	27 50
Jakes, Ernest, South Porcupine, Ont., material and supplies	89 20
Jean, Mrs. J. P., Uno Park, Ont., claim	5 45
Jeffrey & Stevens, North Bay, Ont., work performed	9,734 09
Jeroux, Anthony, Connaught, Ont., material and supplies	112 34
Jibb, Edson, Uno Park, Ont., claim	22 10
Johnson, Captain Albert, Haileybury, Ont., material and supplies	59 07

Johnson, B. F., Cleveland, Ohio, claim	\$10 00
Johnson, C., Cochrane, Ont., claim	25 00
Johnson, D., Matheson, Ont., material and supplies	21 85
Johnson, John, Bourkes, Ont., material and supplies	707 10
Johnson, L. A., Leeville, Ont., material and supplies	56 60
Johnson, Thomas, Leeville, Ont., material and supplies	688 29
Johnston, Andrew A., North Bay, Ont., award, Workmen's Compensation Board	35 30
Johnston, T. T., North Bay, Ont., work performed	65
Jonasen, Norman, Haileybury, Ont., award, Workmen's Compensation Board	17 07
Jones Manufacturing Co., Ltd., D. F., Gananoque, Ont., material and supplies	605 66
Jordon Company, O. F., East Chicago, Ind., material and supplies	526 85
Jory, Limited, P. H., Haileybury, Ont., claims	2 97
Joseph & Company, K., Cochrane, Ont., claims	5 35
Julien & Co., Limited, Eugene, Quebec, Que., claim	5 55
Junor, William, Toronto, Ont., material and supplies	106 68
Kalamazoo Railway Supply Co., Kalamazoo, Mich., material and supplies..	887 90
Kansas City, Mexico & Orient Railway, Kansas City, Mo., car service and car repairs	28 13
Kansas City Southern Railway, Kansas City, Mo., traffic balances and car repairs	3,235 61
Kansas City Terminal Railway, Kansas City, Mo., car repairs	29
Karsons, P. M., Cobalt, Ont., claim	4 71
Kaustine Co., Limited, Toronto, Ont., material and supplies	743 64
Keesmich, D., Iroquois Falls, Ont., claim	1 63
Kelly, W. J., North Bay, Ont., travelling expenses	159 90
Kennedy Brothers, Utica, N.Y., material and supplies	10 50
Kennedy, J. T. G., New Liskeard, Ont., awards, Workmen's Compensation Board	106 83
Kennedy, R., North Bay, Ont., travelling expenses	24 93
Kennedy, Rebecca, North Bay, Ont., work performed	224 97
Kentucky & Indiana Terminal Railroad Company, Louisville, Ky., car repairs	35 75
Kerrigan, D., Englehart, Ont., travelling expenses	75 30
Kerry, J. G. G., Toronto, Ont., services rendered	999 96
Kettle Valley Railroad, Penticton, B.C., traffic balances	15 13
Keuffel & Esser Co. of New York, Montreal, Que., material and supplies....	96 37
Keystone Coal & Coke Company, Greenburg, Pa., car service	5 82
Killoran, John E., Haileybury, Ont., material and supplies	15 60
King, C., Boston Creek, Ont., claim	2 08
King's Printer, Toronto, Ont., material and supplies	285 53
Kipewa Company, Ltd., Haileybury, Ont., claim	6 05
Kirkbride, J., Cochrane, Ont., travelling expenses	34 15
Kirkland Lake Gold Mining Co., Limited, Kirkland Lake, Ont., claims....	6 37
Kitchen, J., Monteith, Ont., material and supplies	309 95
Knapp, William, North Bay, Ont., awards, Workmen's Compensation Board	331 93
Knechtel Furniture Co., Limited, Hanover, Ont., material and supplies	175 53
Knight Bros. & McKinnon, Limited, Cobalt, Ont., material and supplies....	872 25
Krug Furniture Company, Limited, Kitchener, Ont., material and supplies.	52 38
Labelle, Jerry, donation re discovery of broken rail at M. P. 44.....	10 00
Labine, J. A., Earlington, Ont., material and supplies	10 00
Labor Directory, Toronto, Ont., advertising	10 00
Labor News, The, Hamilton, Ont., subscriptions	15 00
Labour Review, Official Annual, Toronto, Ont., advertising	25 00
La Cie Dorchester, Limited, St. Malachie, Que., claim	7 00
Lady Minto Hospital, New Liskeard, Ont., service	156 50
Lafamme, E., Timmins, Ont., claim	47 27
Lafleche, P., Casselman, Ont., claim	37 55
Lafontaine, J., North Bay, Ont., material and supplies	2 10
Lafrance, Orilla, North Bay, Ont., award, Workmen's Compensation Board	22 80
Laidlaw Lumber Company, Limited, R., Toronto, Ont., material and supplies	3,610 20
L'Air Liquide Society, Toronto, Ont., material and supplies	1,024 66
Lake, T. H., Haileybury, Ont., claim	1 70
Lake and Proulx, Clute, Ont., material and supplies	26 60
Lake Erie, Franklin & Clarion Railroad, Franklin, Pa., car service.....	20 70
Lake Erie & Northern Railroad, Galt, Ont., traffic balances	11 81
Lake Erie & Western Railroad, Indianapolis, Ind., car service and car repairs	246 25
Lake Shore Mines, Ltd., Swastika, Ont., claim.....	9 00

Lake Superior Terminal & Transfer Railroad, Superior, Wis., car repairs.	\$0 30
Lakeside & Marblehead Railroad, Cleveland, Ohio, car service	1 20
Lakeview Gold Mines, Ltd., Bourkes, Ont., claim	33 39
Lalonde, Mrs. A., North Bay, Ont., material and supplies	160 25
Lalonde, Alexis, Earlton, Ont., material and supplies	126 25
Lalonde Bros. & Company, Limited, Cochrane, Ont., material and supplies..	77 04
Lamanck, George, Timmins, Ont., awards, Workmen's Compensation Board	539 61
Lamb, R. L., North Bay, Ont., travelling expenses	3 80
Lambton Creamery Company, Petrolia, Ont., material and supplies	858 45
Lamorie, Guy, North Bay, Ont., travelling expenses	17 95
Lapointe, Edgar, North Bay, Ont., award, Workmen's Compensation Board.	12 08
Lapointe, F., Cochrane, Ont., travelling expenses	11 90
Lapointe, Jos., North Bay, Ont., award, Workmen's Compensation Board..	24 48
Laprairie & Brunelle, Timmins, Ont., claims	7 06
Le Blanc, Mrs. A., New Liskeard, Ont., claim	10 00
Lebrun, Mrs. Paul, Cochrane, Ont., claim	7 95
Leclair, A., Connaught, Ont., material and supplies	24 00
Lee, A., Englehart, Ont., travelling expenses	12 50
Lee, Geo. W., North Bay, Ont., honorarium, salary and expenses	5,288 56
Lee, W. F., Latchford, Ont., awards, Workmen's Compensation Board	500 00
Legare, Limited, P. T., Quebec, Que., claims	20 32
Legault, D., Charlton, Ont., claim	10 72
Legault, J. N., Laverlochere, Que., claim	6 60
Legault Hardware Company, Charlton, Ont., claims	27 21
Le Heup, Robert, Haileybury, Ont., award, Workmen's Compensation Board	20 00
Lehigh & Hudson River Railway, Warwick, N.Y., car service and car repairs.	54 41
Lehigh & New England Railroad, South Bethlehem, Pa., car service	182 40
Lehigh Valley Railroad Co., Philadelphia, Pa., traffic balances and car repairs	3,626 77
Leng, J. H., New Liskeard, Ont., land	3,000 00
Lennox, Edward Wallace, Englehart, Ont., award, Workmen's Compensation Board	18 00
Leonard & Sons, Limited, E., London, Ont., material and supplies	120 00
Lerner & Sons, E. M., Ottawa, Ont., claim	25 05
Letke, Adolph, Iroquois Falls, Ont., claim	2 00
Lewis, W. H., Haileybury, Ont., registry fees	10 48
Lindsay, McClusky & Stockdale, North Bay, Ont., material and supplies...	7,514 90
Ling, Fred., North Bay, Ont., award, Workmen's Compensation Board	15 07
Little, Walter, Swastika, Ont., livery hire, etc.	255 75
Livingston, Francis Maurice, North Bay, Ont., awards, Workmen's Compensation Board	273 00
Locker Company, G. R., Montreal, Que., material and supplies	98 52
Locomotive Superheater Company, New York, N.Y., material and supplies.	5,471 31
Loisel, Sam, South Porcupine, Ont., travelling expenses	122 40
London Concrete Machinery Co., Limited, London, Ont., material and supplies	970 63
London & Port Stanley Railway, London, Ont., car repairs	2 03
Long Island Railroad, New York, N.Y., car service, etc.	81 44
Long, R. R., New Liskeard, Ont., claim	26 03
Los Angeles & Salt Lake Railroad Company, Los Angeles, Cal., car service and car repairs	72 56
Louisiana & Arkansas Railway Company, Texarkana, Ark., car service and car repairs	22 20
Louisiana Railway & Navigation Company, Shreveport, La., car service and car repairs	74 78
Louisville Courier Journal, Louisville, Ky., claim	6 90
Louisville Freight Tariff Bureau, Louisville, Ky., tariffs	37 22
Louisville, Henderson & St. Louis Railway Co., Louisville, Ky., car service.	15 32
Louisville & Nashville Railroad, Louisville, Ky., traffic balances and car repairs	736 71
Lowery, W. R., Cobalt, Ont., claim	9 80
Love, Ely, Kenabeek, Ont., claim	1 75
Lovell, J. T., North Bay, Ont., material and supplies	100 80
Lunkenheimer Company, The, Cincinnati, Ohio, material and supplies....	39 15
Lupien, John, Monteith, Ont., material and supplies	177 05
Lye, Arthur L., North Bay, Ont., travelling expenses	13 50
Lyon, Charles, North Bay, Ont., award, Workmen's Compensation Board..	19 87
MacAlpine, J. D., Cleveland, Ohio, publications	23 50
MacLean, Limited, Hugh C., Toronto, Ont., subscription	2 00
MacLean, John G., Haileybury, Ont., material and supplies	945 50

MacLean Publishing Co., Limited, Toronto, Ont., subscriptions	\$6 00
McEwan's Grocery, Cobalt, Ont., claims	7 01
Maher, W. R., North Bay, Ont., travelling expenses	135 35
Mail Printing Co., Limited, Toronto, Ont., subscription and advertising....	33 50
Maille, Adelord, New Liskeard, Ont., material and supplies	1,090 85
Main Belting Co. of Canada, Limited, Montreal, Que., material and supplies	61 83
Maine Central Railroad, Portland, Me., traffic balances and car repairs.....	384 07
Malcolm Condensing Company, Limited, St. George, Ont., material and supplies	332 50
Malkin, Henry S., Charlton, Ont., material and supplies	272 90
Malkin, R. L., Nellie Lake, Ont., material and supplies	515 05
Mallett, Amos., Timmins, Ont., work performed	20 00
Mallory, Mrs. A. E., Timmins, Ont., claim	7 00
Marchand, D., Iroquois Falls, Ont., material and supplies	29 00
Marleau, H., North Bay, Ont., material and supplies	599 64
Marsh & Truman Lumber Co., Chicago, Ill., material and supplies	1,477 11
Marshall-Ecclestone, Limited, Porcupine, Ont., claims	137 69
Martin, J., Timmins, Ont., claim	90
Martin, H., North Bay, Ont., travelling expenses	425 00
Martindale, T., Cane, Ont., material and supplies	97 20
Martyn, F. J., North Bay, Ont., services rendered	4 00
Massey-Harris Co., Limited, Toronto, Ont., claims	39 05
Matheson, Corporation of Town of, Matheson, Ont., water supply	1,700 00
Matheson Trading Co., Limited, Matheson, Ont., claim	2 25
Mathiew, E., North Bay, Ont., travelling expenses	8 00
Mathiew, W., North Bay, Ont., travelling expenses	1 80
Maund, W. H., Toronto, Ont., pay rolls, expenses, etc.	28,769 68
Mead Company, G. H., Detroit, Mich., claims	383 55
Meadows, W., Feronia, Ont., material and supplies	11 25
Meakins & Sons, Limited, Hamilton, Ont., material and supplies	273 02
Medland Brothers, Limited, Toronto, Ont., claims	72
Merchants' & Miners' Transportation Co., Baltimore, Md., traffic balances..	35
Mercur & Co., Limited, R. J., Montreal, Que., material and supplies	279 15
Messenger, A., New Liskeard, Ont., claim	1 76
Meyers, E. J., Timmins, Ont., claim	42 46
Mexico Northwestern Railway, El Paso, Texas, car service	21 60
Michigan Central Railroad Company, Detroit, Mich., traffic balances and car repairs	91,613 77
Middle Tennessee Railroad Company, Nashville, Tenn., car service	11 40
Middleton, Wellington, Kenabeek, Ont., material and supplies	15 70
Midland Valley Railroad, Muskogee, Okla., car service	12 00
Might Directories, Limited, Toronto, Ont., services rendered, etc.	27 65
Might, L., Cochrane, Ont., claim	3 10
Millburn, Edward, Cochrane, Ont., award, Workmen's Compensation Board.	27 92
Miller & McDonnell, Charlton, Ont., claims	2 82
Miller Chemical Engine Co., Chicago, Ill., material and supplies	25 70
Mills, William, Heaslip, Ont., material and supplies	623 75
Milne, Wm., & Son, Ltd., North Bay, Ont., refund telephone rental	8 30
Milton, C. H., Boston Creek, Ont., claim	13 85
Minneapolis & St. Louis Railroad, Minneapolis, Minn., traffic balances and car repairs	809 87
Minneapolis, St. Paul & Sault Ste. Marie Railway, Minneapolis, Minn., traffic balances and car repairs	2,125 30
Minnesota & International Railroad, St. Paul, Minn., car repairs	2 41
Minnesota, Dakota & Western Railway Co., International Falls, Minn., claim, etc.	19 00
Miner, W. H., Chicago, Ill., material and supplies	1,019 35
Minnes, Dr. R. S., Ottawa, Ont., services rendered	50 00
Minto Bros., Toronto, Ont., claim	1 36
Miron, Alex., Uno Park, Ont., award, Workmen's Compensation Board.....	261 54
Mississippi Central Railroad, Hattiesburg, Miss., car service	27 30
Mississippi River & Bonne Terre Railway, Bonne Terre, Mo., car service...	5 40
Missouri, Kansas & Texas Railway Company, St. Louis, Mo., traffic balances and car repairs	362 28
Missouri, Kansas & Texas Railroad of Texas, Dallas, Texas, car repairs..	93 96
Missouri, Oklahoma & Gulf Railway Co., Muskogee, Okla., car service, etc...	24 24
Missouri Pacific Railway, St. Louis, Mo., traffic balances and car repairs..	4,829 97
Mitchell, R. H., North Bay, Ont., travelling expenses	11 25
Mitchell, R. R., Cochrane, Ont., rent	4 00
Mitchell, Steward, Thornloe, Ont., claim	2 20

Mobile & Ohio Railroad, Mobile, Ala., car service and car repairs	\$124 26
Monahan, J. A., Matheson, Ont., material and supplies	122 86
Monarch Garage & Machine Co., North Bay, Ont., work performed	17 00
Monarch Metal Co., Ltd., Hamilton, Ont., material and supplies	2,716 45
Moncion, J. B., Nushka, Ont., claim	21 00
Monetary Times Printing Co., Limited, Toronto, Ont., advertisements.....	53 00
Monette, A. P., Toronto, Ont., material and supplies	2 76
Monongahela Railway Company, Brownsville, Pa., traffic balances	2 55
Monongahela Valley Traction Company, Fairmont, W.V., car service	4 50
Montana, Wyoming & Southern Railway, Belfry, Mont., car service	7 50
Monteith, David, Watabeag, Ont., material and supplies	214 00
Monteith Pulp & Timber Co., Limited, Monteith, Ont., refund telephone rental	10 00
Montemurro, R., North Bay, Ont., travelling expenses	35 50
Montemurro, S., North Bay, Ont., travelling expenses	24 00
Montour Railroad, Pittsburg, Pa., car service	80 65
Montreal Cotton & Wool Waste Co., Limited, Montreal, Que., material and supplies	7,365 72
Montreal Electric Co., Limited, The, Montreal, Que., work performed	46 70
Montreal Financial Times Publishing Co., Montreal, Que., tariffs	155 04
Montreal Locomotive Works, Limited, New York, N.Y., repairs, locomotives, etc.	135,296 44
Montreal Star Publishing Co., Limited, Montreal, Que., advertising.....	23 54
Moore, Dr. H. H., Timmins, Ont., services rendered	66 75
Moore, Hugh, Matheson, Ont., donation	500 00
Morgan, Geo., Porquis Jct., Ont., material and supplies	128 40
Morgan's Louisiana & Texas Railroad & Steamship Co., New Orleans, La., traffic balances and car repairs	3,147 07
Morgantown & Kingwood Railroad, Morgantown, W.Va., car service	18 00
Morley, Gordon, Thornloe, Ont., claim	5 62
Morris & Company Refrigerator Line, Chicago, Ill., car service	4 64
Morrissey & Davies, Latchford, Ont., claims	69 56
Morrison, The James, Brass Manufacturing Co., Ltd., Toronto, Ont., material and supplies	1,629 75
Morrison, John, Porquis Jct., Ont., material and supplies	53 55
Morrow & Beatty, Smooth Rock Falls, Ont., refund deposit on siding	101 93
Morrow, John, Screw & Nut Co., Ltd., Ingersoll, Ont., material and supplies	203 61
Morse Twist Drill & Machine Company, New Bedford, Mass., material and supplies	24 30
Mueller, H., Manufacturing Co., Limited, Sarnia, Ont., material and supplies	292 75
Mullin, Miss Patricia, Haileybury, Ont., award, Workmen's Compensation Board	100 00
Municipal Intelligence Bureau, Toronto, Ont., advertising	25 00
Murphy, E. M., New Liskeard, Ont., travelling expenses.....	21 00
Murphy, Mrs. S., North Bay, Ont., material and supplies	38 16
Mussens, Limited, Montreal, Que., material and supplies	1,239 51
Myles, J. N., Haileybury, Ont., work performed	2 00
Myles & Co., Cobalt, Ont., work performed	2 00
"My Valet," North Bay, Ont., work performed	117 50
Macrea's Blue Book Co., Chicago, Ill., publication	9 00
McAra, H., Kingston, Ont., unclaimed wages	3 40
McAuslan & Anderson, North Bay, Ont., services rendered	30 30
McBurney, J. & J., North Bay, Ont., material and supplies	1,232 88
McCann, James, Timmins, Ont., claim	6 85
McCauley Bros., Kenabeek, Ont., material and supplies	3,554 95
McChristie, Archie, Matheson, Ont., material and supplies	9 00
McClary Manufacturing Company, Toronto, Ont., material and supplies...	371 82
McCloud River Railroad Company, McCloud, Cal., car service	12 60
McCord Brothers, Limited, Toronto, Ont., material and supplies	340 90
McCord & Company, Inc., Chicago, Ill., material and supplies	1,587 40
McCord Manufacturing Company, Inc., Detroit, Mich., material and supplies	45 75
McCrimmon & Crate, Toronto, Ont., material and supplies	126 66
McDonald, J. W., North Bay, Ont., claims	1 65
McDonnell, B., North Bay, Ont., travelling expenses	2 50
McDonough Brothers, Haileybury, Ont., claim	48 00
McEachern, D. J., & Son, Alvinston, Ont., material and supplies	571 13
McEachern, Malcolm, Leeville, Ont., material and supplies	15 10
McEwan, P., Cobalt, Ont., claims	7 42
McFarland, Alexander, New Liskeard, Ont., material and supplies	102 75
McFarlane, Son & Hodgson, Montreal, Que., material and supplies	178 50
McGee, H. H., North Bay, Ont., travelling expenses	651 00

McGill, R., North Bay, Ont., travelling expenses	\$177 00
McGrathers, W. J., Widdifield, Ont., material and supplies	96 00
McGregor & McIntyre, Toronto, Ont., material and supplies	1,063 38
McGruthers, W. H., Widdifield, Ont., material and supplies	1,285 00
McInnis, Charles, Timmins, Ont., claim	13 05
McInnis, Dr. J. A., Timmins, Ont., services rendered	4 00
McIntosh, A. A., North Bay, Ont., material and supplies	1,204 12
McIntyre Mercantile Co., Limited, Schumacher, Ont., claim	52 82
McIntyre Porcupine Mines, Limited, Schumacher, Ont., claims	114 48
McKee, Mrs. Laura, Elk Lake, Ont., rentals	50 00
McKerrow, Geo., North Bay, Ont., material and supplies	765 99
McKinley, Darragh, Savage Mines of Cobalt, Limited, Cobalt, Ont., claims..	32 92
McKinnon, John A., Haileybury, Ont., material and supplies	1,425 00
McKnight, Wesley, New Liskeard, Ont., claim	153 30
McLaren, The J. C., Belting Co., Limited, Montreal, Que., material and sup- plies	30 00
McLean, J. B., North Bay, Ont., travelling expenses	21 00
McLellan, J., North Bay, Ont., travelling expenses	269 45
McLeod, Mrs. Margaret, North Bay, Ont., awards, Workmen's Compensation Board	536 00
McLeod, R. P. C., North Bay, Ont., travelling expenses	10 35
McLeod, Robert, North Bay, Ont., award, Workmen's Compensation Board.	28 93
McManus, M. J., North Bay, Ont., travelling expenses	27 15
McMillan, N. A., North Bay, Ont., travelling expenses	409 45
McMonagle, E., Cobalt, Ont., claims, etc.	3 04
McMurphy, Dr. A., North Bay, Ont., services rendered	25 00
McNamara Lumber Company, Limited, North Bay, Ont., material and sup- plies	282 64
McNeill, H. A., Fort William, Ont., unclaimed wages	151 65
Nadeau, J. A., LaTuque, Que., claim	10 00
Naismith, G., North Bay, Ont., travelling expenses	40 30
National Drug & Chemical Co. of Canada, Ltd., Toronto, Ont., material and supplies	786 05
National Grocers, Limited, North Bay, Ont., material and supplies	14,040 14
National Lock Washer Company, Newark, N.J., material and supplies	728 01
National Paper Goods Co., Limited, Hamilton, Ont., material and supplies..	17 00
National Railway Publication Company, New York, N.Y., representation in Official Guide	83 38
National Typewriter Co., Limited, Toronto, Ont., material and supplies	505 00
National Woodenware Co., St. Thomas, Ont., material and supplies.....	91
Napierville Junction Railway Company, New York, N.Y., traffic balances...	9 08
Nashville, Chattanooga & St. Louis Railway, Nashville, Tenn., traffic balances and car repairs	1,846 83
Neely, Mrs. Robert, Toronto, Ont., material and supplies	93 00
Ness, Charles, North Bay, Ont., travelling expenses	5 15
New, A., Widdifield, Ont., material and supplies	608 00
Newberry, W., Widdifield, Ont., material and supplies	8 60
Newburg & South Shore Railway Company, Cleveland, Ohio, car service...	11 70
New England Fuel & Transportation Company, Boston, Mass., car service..	4 62
New England Steamship Company, New Haven, Conn., interline freight...	2 57
New Jersey, Indiana & Illinois Railroad, South Bend, Ind., traffic balances..	25 11
New Liskeard Farmers' Co-Operative Co., Limited, New Liskeard, Ont., material and supplies	1,568 55
New Liskeard, Corporation of the Town of New Liskeard, Ont., water supplied	271 10
New Orleans Freight Tariff Bureau, New Orleans, La., tariffs	25 28
New Orleans Great Northern Railway, Bogalusa, La., car service and car repairs	168 85
New Orleans, Mobile & Chicago Railroad, Mobile, Ala., car service	3 00
New Orleans Public Belt Railroad, New Orleans, La., car repairs	138 43
New Orleans, Texas & Mexico Railway, Houston, Tex., car service and car repairs	203 38
Newton, Wm., Cobalt, Ont., work performed	13 00
New York, Central & Hudson River Railroad, New York, N.Y., traffic bal- ances and car repairs	6,887 17
New York, Chicago & St. Louis Railroad, Cleveland, Ohio, traffic balances and car repairs	814 61
New York, New Haven & Hartford Railroad Co., New Haven, Conn., car service and car repairs	414 66

New York, Ontario & Western Railway Co., New York, N.Y., traffic balances and car repairs	\$212 78
New York, Susquehanna & Western Railroad, New York, N.Y., car service and car repairs	144 53
Niagara, St. Catharines & Toronto Railway, St. Catharines, Ont., claims	5 61
Nichols Chemical Co., Ltd., Montreal, Que., material and supplies.....	206 04
Nicholson File Co., Port Hope, Ont., material and supplies	1,220 50
Nipissing Central Railway, Toronto, Ont., material and supplies, etc. ...	56,839 80
Nipissing Laundry Co., Ltd., North Bay, Ont., work performed	109 49
Nipissing Mining Co., Ltd., Cobalt, Ont., claim	48 63
North American Bent Chair Co., Ltd., Owen Sound, Ont., material and supplies	163 78
North American Car Co., Chicago, Ill., car service	4 12
North Bay, Corporation of the Town of North Bay, Ont., water supplied....	3,826 52
<i>North Bay Times</i> , North Bay, Ont., advertising	17 25
Norfolk & Rochester Hardware Co., Ltd., Haileybury, Ont., claims	18 51
Norfolk & Western Railway Co., Roanoke, Va., traffic balances and car repairs	3,927 72
Norfolk Southern Railroad Co., Norfolk, Va., car service and car repairs....	86 21
Northern Builders' Supply Co., North Bay, Ont., material and supplies.....	169 41
Northern Canada Supply Co., Ltd., Cobalt, Ont., claims, etc.	307 75
Northern Electric Co., Ltd., Montreal, Que., material and supplies.....	4,369 48
Northern Lumber Mills, Ltd., North Cobalt, Ont., material and supplies	2,452 78
<i>Northern Miner Press</i> , Ltd., Cobalt, Ont., subscriptions	1 50
Northern Ontario Light & Power Co., Ltd., Timmins, Ont., current supplied	836 84
Northern Ontario Light & Power Co., Ltd., Cobalt, Ont., current supplied..	589 58
Northern Ontario Light & Power Co., Ltd., Haileybury, Ont., current supplied	60 20
Northern Ontario Light & Power Co., Ltd., South Porcupine, Ont., current supplied	203 38
Northern Ontario Light & Power Co., Ltd., New Liskeard, Ont., current supplied	174 16
Northern Ontario Light & Power Co., Ltd., Cochrane, Ont., current supplied	92 97
Northern Ontario Light & Power Co., Ltd., Englehart, Ont., current supplied	946 81
Northern Pacific Railway Co., St. Paul, Minn., car service and car repairs.	1,066 04
Northern Wood Products, Ltd., Cane, Ont., material and supplies	254 29
Northwestern Motor Co., Eau Claire, Wisconsin, material and supplies....	2 32
Northwestern Pacific Railroad Co., San Francisco, Cal., car service	8 10
Norton, Ltd., A. O., Boston, Mass., material and supplies.....	680 22
O'Brien, H., North Cobalt, Ont., work performed	16 00
O'Brien Mines, Ltd., Cobalt, Ont., claim	226 86
O'Connell, D., North Bay, Ont., award, Workmen's Compensation Board...	53 71
O'Connor, M., Connaught, Ont., claims	7 88
Office Specialty Manufacturing Co., Ltd., Toronto, Ont., material and supplies	531 83
Official Classification Committee, New York, N.Y., proportion of expenses..	42 11
Official List of Open and Prepay Stations, St. Louis, Mo., publications.....	11 60
Olaski, A., Sudbury, Ont., unclaimed wages	23 75
Old Dominion Steamship Co., New York, N.Y., traffic balances	67
Oldham, W. J., North Bay, Ont., travelling expenses	135 20
Ontario Fertilizers, Ltd., West Toronto, Ont., material and supplies	12 75
Ontario Paper Co., Chicago, Ill., claim	12 80
Ontario Sewer Pipe Co., Ltd., Mimico, Ont., material and supplies	363 53
Ontario, Treasurer of, Toronto, Ont., on account of proceeds from operation, timber, dues, etc.	112,980 53
Oregon Short Line Railroad Co., Salt Lake City, Utah, car repairs	59 50
Oregon Washington Railroad & Navigation Co., Portland, Ore., car repairs.	29 39
Orillia Creamery Co., Orillia, Ont., claim	114 36
Orr, Laura A., Toronto, Ont., advertising	100 00
Orr, O. T., South Porcupine, claim	15 00
Orr & Steinbrenner Co., Chicago, Ill., material and supplies	258 58
Ostrom, Charles, North Bay, Ont., award, Workmen's Compensation Board.	59 92
Otley Paint Manufacturing Co., Inc., Chicago, Ill., material and supplies	55 18
Ottawa Car Manufacturing Co., Ltd., Ottawa, Ont., material and supplies..	150 00
Owen & Co., J. J., North Bay, Ont., material and supplies	1,008 00
Pacific Coast Railroad, Seattle, Wash., car service	1 30
Pacific Fruit Express, San Francisco, Cal., car service	83 18
Pacific Steamship Co., Tacoma, Wash., traffic balances	12 64
Page Hersey Iron Tube Co., Ltd., Toronto, material and supplies	2,220 90

Palmer, G. E., North Bay, Ont., travelling expenses	\$363 95
P. & M. Co., Ltd, Chicago, Ill, material and supplies	3,468 00
Pare, E, Haileybury, Ont., claim	21 45
Parliament, E. R., New Liskeard, Ont., claim	16 00
Parr, A. J., North Bay, Ont., travelling expenses	254 23
Pearce, William D., South Porcupine, Ont., claims	17 02
Pease Foundry Co., Ltd., Toronto, Ont., material and supplies	58 46
Pedlar People, Ltd., The, Oshawa, Ont., material and supplies	366 45
Peerless Carbon & Ribbon Manufacturing Co., Toronto, Ont., material and supplies	297 10
Peerless Transit Line, Cleveland, Ohio, car service	15 27
Pelangio, J., Cochrane, Ont., claim	199 74
Penman, Joseph, Pearson, Ont., claim	2 82
Pennsylvania System, Philadelphia, Pa., traffic balances and car repairs....	19,450 77
Pennsylvania Tank Line, Sharon, Pa., car service	2 06
Peoria & Pekin Union Railway Co., Peoria, Ill., car repairs	22 69
Pere Marquette Railroad, Detroit, Mich., traffic balances and car repairs...	498 71
Perkus & Co., Cochrane, Ont., claims	78 41
Perlmutter & Nathanson, Iroquois Falls, Ont., claims	37 03
Peters, Duncan, Ltd., North Bay, Ont., material and supplies	3,035 37
Petrie, Ltd., W. H., Toronto, material and supplies	19 54
Philadelphia & Reading Railroad, Philadelphia, Pa., traffic balances and car repairs	980 91
Phillips Electrical Works, Ltd., Montreal, Que., material and supplies	22 00
Picard, P., North Bay, Ont., travelling expenses	86 80
Pierce Lumber Co., Ltd., Timmins, Ont., refund deposit on siding	212 86
Pike Co., Ltd., D., Toronto, material and supplies	90 00
Pilkington Bros., Ltd., Toronto, material and supplies	3,126 35
Pilling, Harry, North Bay, Ont., travelling expenses	3 00
Pilling, W., North Bay, Ont., material and supplies	322 77
Pillsworth, Percy, Englehart, Ont., travelling expenses	34 75
Pink Co., Ltd., Thos., Pembroke, Ont., material and supplies	105 75
Pintsch Compressing Co., New York, N.Y., gas supplied	2,498 85
Pipe, Taylor, Cobalt, Ont., claims	302 59
Piper Co., Ltd., Hiram L., Montreal, Que., material and supplies	339 12
Piper Railway Supply Co., Ltd., N. L., Toronto, Ont., material and supplies.	1,652 61
Pittsburg & Lake Erie Railroad Co., Pittsburg, Pa., traffic balances and car repairs	1,692 04
Pittsburg & West Virginia Railway Co., Pittsburg, Pa., traffic balances and car repairs	614 86
Pittsburg, Chartiers & Youghiogheny Railroad, Pittsburg, Pa., car service.	1 80
Pittsburg, Lisbon & Western Railroad, Lisbon, Ohio, traffic balances	9 62
Pittsburg Meter Co., East Pittsburg, Pa., material and supplies	31 65
Pittsburg, Shawmut & Northern Railroad, St. Mary's, Pa., car service and car repairs	367 76
Pittsburg, Shawmut Railroad Co., Kittanning, Pa., car service, etc.	284 40
Pittsburg Spring & Steel Co., Pittsburg, Pa., material and supplies	4,418 44
Planet, The, Chatham, Ont., material and supplies	697 93
Plant, Joseph, Uno Park, Ont., material and supplies	48 70
Poisson, H., Cobalt, Ont., claim	10 55
Pollock & Son, William, Englehart, Ont., material and supplies	6 00
Porcupine Crown Mines Co., Ltd., Timmins, Ont., claim	24 84
Porcupine Telephone Lines, Ltd., South Porcupine, Ont., telephone service.	180 00
Porter, A. H., Elk Lake, Ont., rental, telephone office	100 00
Porter, A. S., Elk Lake, Ont., claim	4 00
Porter & Co., Elk Lake, Ont., work performed	10 87
Potter, Edward, Earleton, Ont., material and supplies	22 20
Potter, Thomas, McCool, Ont., material and supplies	292 68
Pound, A. R., Toronto, Ont., unclaimed wages	273 31
Powell, C. H., Englehart, Ont., material and supplies	769 77
Powell Furniture Co., The, Cochrane, Ont., claims	93 82
Pratt & Letchworth Co., Ltd., The, Brantford, Ont., material and supplies..	892 30
Pratt & Whitney Co. of Canada, Ltd., Dundas, Ont., material and supplies .	387 61
Pringle, T. M., North Bay, Ont., travelling expenses, etc.	30 46
Prescott, D., North Bay, Ont., travelling expenses	3 00
Pressed Prism Plate Glass Co., Morgantown, W.Va., material and supplies..	5 63
Prest-O-Lite Company of Canada, Limited, Toronto, Ont., material and supplies	596 90
Preston, E., Englehart, Ont., travelling expenses	31 00

Preston Limited, F. C., Haileybury, Ont., claims	\$10 36
Preston, Dr. R. F., Carleton Place, Ont., honorarium, salary and expenses...	4,237 21
Protectograph Company of Canada, Toronto, Ont., material and supplies...	59 65
Providence General Hospital, Haileybury, Ont., award, Workmen's Compensation Board	231 00
Prowse Range Co., Limited, Geo. R., Montreal, Que., material and supplies	27 50
Pugsley, Rev. E. E., Iroquois Falls, Ont., claim	5 00
Pullan Wipers & Waste Co., Limited, E., Toronto, Ont., material and supplies	3,485 44
Pullman Company, The, Chicago, Ill., car repairs, etc.	394 32
Purdy Mansell, Limited, Toronto, Ont., material and supplies	11 10
Quannah Acme & Pacific Railroad, Quannah, Texas, car service	37 20
Quanty, Geo., Cane, Ont., material and supplies	73 55
Quebec Central Railway, Sherbrooke, Que., traffic balances and car repairs	161 43
Quebec, Montreal and Southern Railway, New York, N.Y., traffic balances and car repairs	901 85
Queen's Hotel, Timmins, Ont., board	7 50
Queen Victoria Memorial Hospital, North Bay, Ont., donation	200 00
Quinlan, H. J., North Bay, Ont., travelling expenses	78 00
Radford, A., Englehart, Ont., claim	14 00
Rail Joint Co. of Canada, Ltd., Montreal, Que., material and supplies.....	15,394 81
Railroad Commission, State of California, San Francisco, Cal., material and supplies	10 00
Railway Association of Canada, Montreal, Que., proportion of expenses, Railway War Board	547 48
Railway Accounting Officers' Association, Washington, D.C., membership fees, etc.	37 16
Railway Equipment & Publication Co., New York, N.Y., subscription, etc.	152 00
Railway & Locomotive Engineering, New York, N.Y., subscription	2 00
Railway Review, Chicago, Ill., subscriptions	8 00
Ranch, Ltd., H.P.R., Matheson, Ont., material and supplies	6 00
Rankin, Robert, North Bay, Ont., material and supplies	2,293 77
Ranney, Dr. A. E., North Bay, Ont., awards, Workmen's Compensation Board	108 50
Rantonen, A., Rosegrove, Ont., claim	18 92
Raritan River Railroad Company, South Amboy, N.Y., traffic balances	14 70
Ratcliff, A. E., Toronto, Ont., subscription	2 00
Ratcliff Paper Company, Ltd., Toronto, Ont., material and supplies	94 67
Rava & Pianfetti, Cobalt, Ont., claim	5 15
Raw, Limited, J. Frank, Toronto, Ont., material and supplies	24 80
Rawlinson, John, Porquis Junction, Ont., material and supplies	203 30
Reamsbottom & Edwards, Connaught, Ont., tie making, etc.	89,503 95
Reckin & Sons, Charles, Cobalt, Ont., claims	116 62
Reid, J. W., Timmins, Ont., material and supplies	29 00
Relph, Frank Thomas, North Bay, Ont., award, Workmen's Compensation Board	11 62
Remington Typewriter Company, Limited, Toronto, Ont., material and supplies	190 70
Rennie Co., Limited, Wm., Toronto, Ont., material and supplies	94 85
Reynolds, Charles, Gillies Depot, Ont., award, Workmen's Compensation Board	14 08
Reynolds, Mrs. Helen E., North Bay, Ont., awards, Workmen's Compensation Board	533 00
Ricci, F., Bushnell, Ont., award, Workmen's Compensation Board	20 00
Riccuito, F., North Bay, Ont., award, Workmen's Compensation Board	27 34
Rice, Lewis & Son, Ltd., Toronto, Ont., material and supplies	424 50
Richardson, J., North Bay, Ont., travelling expenses	15 30
Richard, Ernest, Montreal, Que., claim	25 50
Richardson, Bond & Wright, Limited, Owen Sound, Ont., material and supplies	5,261 26
Richardson, F. C., Porquis Jct., Ont., claim	2 15
Richardson, J. W., North Bay, Ont., material and supplies	121 16
Richmond, Fredericksburg & Potomac Railroad Company, Richmond, Va., car service and car repairs	110 50
Rio Grande & Eagle Pass Railway Company, Laredo, Texas, car repairs....	3 25
Ritchie, W., North Bay, Ont., travelling expenses	50
Robb Engineering Works, Limited, Amherst, N.S., material and supplies...	171 00
Robb, William E., North Bay, Ont., award, Workmen's Compensation Board	14 33
Robertson & Co., Limited, Thomas, Montreal, Que., material and supplies ..	24 69

Robertson Cataract Electric Company, Buffalo, N.Y., material and supplies.	\$24 00
Robertson Co., Limited, James, Montreal, Que., material and supplies.....	592 74
Roberge, L. D., Kirkland Lake, Ont., claims	22 89
Robins, W. T., North Bay, Ont., travelling expenses	2 40
Rockwell, Barnes Company, Chicago, Ill., material and supplies	190 19
Rodd & Deacon, Cobalt, Ont., claim	22 70
Rodgers, H. L., North Bay, Ont., travelling expenses	733 00
Rodgers, S., Charlton, Ont., work performed	2 00
Rogers, Edwin Wm., North Bay, Ont., award, Workmen's Compensation Board	16 76
Roody, M., North Cobalt, Ont., claim	8 38
Rooney, Samuel, Porquis Junction, Ont., material and supplies	17 40
Rorabeck, A. C., North Bay, Ont., material and supplies	86 25
Ross, Thomas, North Bay, Ont., travelling expenses	31 45
Rota, J., North Bay, Ont., travelling expenses	6 15
Rous & Mann, Ltd., Toronto, Ont., material and supplies	19 00
Rousson, X., Cochrane, Ont., claim	30 00
Rowden, H. W., Cobalt, Ont., claim	5 03
Rowe Iron Mills, Inc., New York, N.Y., material and supplies.....	74 02
Rowlandson, J., Porquois Junction, Ont., claims, etc.	217 29
Royal Broom Co., Ingersoll, Ont., material and supplies	3 10
Royal Polishes Company, Montreal, Que., material and supplies.....	70 00
Rung, Arthur F., Company, Toronto, Ont., typewriter inspection.....	99 25
Rushton, Blair, Kenabeek, Ont., material and supplies	25 45
Russia Cement Company, Gloucester, Mass., material and supplies.....	198 96
Rutland Railroad, New York, N.Y., traffic balances	308 69
Rutledge, Valerian, North Bay, Ont., award, Workmen's Compensation Board	50 00
Ryan, S. H., North Bay, Ont., travelling expenses.....	201 85
Ryerson Press, The, Toronto, Canada, work performed.....	76 00
Ryerson & Son, Joseph T., Chicago, Ill., material and supplies.....	157 61
St. Dennis, Edward, Cobalt, Ont., material and supplies	9 77
St. George, C., Thornloe, Ont., claim	14 40
St. John Ambulance Association, The, Toronto, Ont., material and supplies	21 45
St. Joseph & Grand Island Railroad, St. Joseph, Mo., car repairs and car service	1 20
St. Louis, S., Haileybury, Ont., claim	11 02
St. Louis & Belleville Electric Railway Co., East St. Louis, Ill., car service	11 70
St. Louis & San Francisco Railway Co., St. Louis, Mo., traffic balances and car repairs	372 22
St. Louis Southwestern Railway Co., St. Louis, Mo., car repairs.....	37 02
St. Louis Southwestern Railway Co. of Texas, Tyler, Texas, car service and car repairs	373 62
St. Louis, Troy & Eastern Railroad, St. Louis, Mo., car service.....	10 80
St. Maurice Lumber Co., Connaught, Ont., claims, etc.	46 22
Safety Car Heating & Lighting Company, New York, N.Y., material and supplies	1,204 32
Sale, T. M., North Bay, Ont., work performed	21 70
Samson Cordage Works, Boston, Mass., material and supplies	84 81
San Antonio & Aransas Pass Railway, San Antonio, Texas, car service and car repairs	129 26
Sandrelli, Charles & James Demario, North Bay, Ont., work performed....	780 19
Sandy Valley & Elkhorn Railway, Baltimore, Md., car service	108 90
Sarnia Bridge Co., Limited, Sarnia, Ont., material and supplies	1,260 46
Saumier, A. J. B., Swastika, Ont., claims	22 80
Savannah & Atlanta Railway, Savannah, Ga., car repairs.....	4 68
Savard, R., Cobalt, Ont., claims	1 90
Schlievert, G., Englehart, Ont., travelling expenses.....	3 00
Scott, A. E., Nellie Lake, Ont., material and supplies	112 95
Scott, F. A., Nellie Lake, Ont., material and supplies	59 20
Scott, Frederick, J., Ramore, Ont., award, Workmen's Compensation Board	102 56
Scott, Mrs. L., Timmins, Ont., claim	6 00
Scott & Company, James, Montreal, P.Q., claims	27 39
Scully, Limited, Wm., Montreal, P.Q., material and supplies.....	214 21
Scythes & Co., Limited, Toronto, Ont., material and supplies.....	2,454 08
Seaboard Air Line Railway, Portsmouth, Va., traffic balances and car repairs	548 92
Sequin, Mrs. S., Connaught, Ont., material and supplies	48 75
Slotnick, S., S. Porcupine, Ont., material and supplies	7 56
Shaheen & David, Cochrane, Ont., claim	10 00
Sharpe, H. W., North Bay, Ont., travelling expenses	5 40

Shaw, Dr. W. F., Callander, Ont., services rendered	\$25 00
Shea, Smith & Company, Chicago, Ill., material and supplies	12 17
Shedden Forwarding Co., Ltd., Ottawa, Ont., claim	25 00
Sheedy, E., North Bay, Ont., award, Workmen's Compensation Board.....	1 00
Sheet Metal Products Co. of Canada, Limited, Toronto, Ont., material and supplies	805 40
Sheldons, Limited, Galt, Ont., material and supplies	408 23
Shell Bar Boico Supply Ltd., Toronto, Ont., material and supplies.....	22 75
Shelle, Robert, Kenabeek, Ont., claim	1 40
Sherer-Gillett Company, Chicago, Ill., claim	50
Sherwin-Williams Co. of Canada, Limited, Montreal, Que., material and supplies	424 40
Shields, E., Porquis Junction, Ont., material and supplies	7 50
Shields, J. S., Timmins, Ont., claim	13 87
Shirton Co., Ltd., The William, Dunnville, Ont., material and supplies....	660 00
Shurley & Dietrich Co., Limited, Galt, Ont., material and supplies.....	329 29
Smallpiece, H. E., Toronto, Ont., advertising	15 00
Smiley, F. L., Haileybury, Ont., services rendered	93 89
Smith, A. M., Charlton, Ont., work performed	20 00
Smith & Sons, Limited, John, Toronto, Ont., material and supplies.....	3,008 85
Smith, Cyril P., North Bay, Ont., material and supplies	8 40
Smith, James Ralph, Englehart, Ont., award, Workmen's Compensation Board	97 56
Smith, R. G., South Porcupine, Ont., material and supplies.....	18 50
Smith's Falls Malleable Castings Co., Limited, Smith's Falls, Ont., material and supplies	394 92
Sinclair, C. E., Angus, Toronto, Ont., work performed.....	30,157 83
Singer Sewing Machine Co., Inc., Toronto, Ont., claims	9 50
Simard, E., Haileybury, Ont., claim	28
Simmers, Ltd., J. A., Toronto, Ont., material and supplies.....	89 53
Simonds Canada Saw Co., Limited, Montreal, P.Q., material and supplies..	33 57
Simmons-Boardman Publishing Co., New York, N.Y., subscriptions.....	10 00
Simplex Cleaner Manufacturing Co., Toronto, Ont., material and supplies..	18 25
Simpson, G. M., North Bay, Ont., travelling expenses	149 23
Simpson, James, Kenabeek, Ont., material and supplies	60 05
Society of Railway Financial Officers, Philadelphia, Pa., membership fees	10 00
South Brooklyn Railway Company, New York, N.Y., traffic balances	8 14
South Buffalo Railway, Buffalo, N.Y., car repairs	5 92
Southern Hardwood Traffic Association, Memphis, Tenn., claim.....	1 55
Southam Press, Limited, Toronto, Ont., printing	6,259 01
Southern Classification Committee, Atlanta, Ga., proportion of expenses..	20 18
Southern Pacific Railroad Company of Mexico, Tucson, Arizona, car repairs	12 27
Southern Pacific Railway, San Francisco, Cal., traffic balances and car repairs	1,205 11
Southern Railway System, Washington, D.C., car service and car repairs	1,722 84
South Georgia Railway Co., Quitman, Ga., car repairs.....	3 04
Spanish River Pulp & Paper Mills, Limited, Sault Ste. Marie, Ont., claims	68 49
<i>Spectator</i> Printing Co., Limited, Hamilton, Ont., advertising	20 00
Spencer, Sidney J., Englehart, Ont., awards, Workmen's Compensation Board	94 43
Spino, M., North Bay, Ont., award, Workmen's Compensation Board.....	21 56
Spokane & Eastern Railway & Power Co., Spokane, Washington, car service and car repairs	17 01
Spokane International Railway, Spokane, Wash., car repairs.....	1 55
Spokane, Portland & Seattle Railway, Portland, Ore., car service and car repairs	20 46
Sproul & Soucie, New Liskeard, Ont., award, Workmen's Compensation Board	23 15
Stainton, Downey & Evis, Toronto, Ont., material and supplies.....	401 04
Standard Planing Mills, Limited, North Bay, Ont., material and supplies..	6,241 80
Standard Steel Construction Co., Limited, Port Robinson, Ont., material and supplies	4,314 01
Stark, Jos., North Bay, Ont., award, Workmen's Compensation Board.....	22 85
Steel & Radiation, Limited, Toronto, Ont., claim	23 28
Steel Company of Canada, Limited, Hamilton, Ont., material and supplies	47,008 94
Steel Equipment Co., Limited, Ottawa, Ont., material and supplies.....	65 23
Steele-Briggs Seed Co., Limited, Toronto, Ont., material and supplies....	4 50
Stelling & Heady, Widdifield, Ont., material and supplies	375 00
Stenning, R., North Bay, Ont., travelling expenses	19 82
Stephenson & Son, New Liskeard, Ont., advertising	4 00

Sterling Salt Company, New York, N.Y., material and supplies.....	\$185 65
Stevens, A., Temagami, Ont., claims, etc.	244 55
Stevens, David R., Englehart, Ont., award, Workmen's Compensation Board	83 51
Stewart, Jas. A., New Liskeard, Ont., claim	78 93
Still Manufacturing Co., Limited, J. H., St. Thomas, Ont., material and supplies	899 76
Stock, W. M. & P. H., Timmins, Ont., work performed	4 50
Stokell, L., Englehart, Ont., claim	7 97
Stone, Franklin Co., Montreal, P.Q., material and supplies.....	792 55
Strain, W. A., S. Porcupine, Ont., material and supplies	35 00
Stromberg, Allen & Co., Chicago, Ill., material and supplies.....	38 50
Stromberg-Carlson Telephone Manufacturing Co., Rochester, N.Y., material and supplies	20 80
Strong Drug Co., Limited, Haileybury, Ont., claims.....	32 42
Sturgeon, Geo., North Bay, Ont., award, Workmen's Compensation Board..	18 14
Sullivan & Shillington, Cobalt, Ont., claims	148 56
Sullivan, Norman J., Elk Lake, Ont., travelling expenses.....	225 85
Sunbeam Specialty Co., Limited, Toronto, Ont., material and supplies.....	66 82
Susquehanna & New York Railroad, Williamsport, Pa., car service.....	20 70
Sutcliffe & Neelands, New Liskeard, Ont., services rendered	175 69
Sutton, Wm., Hilliardton, Ont., claim	3 62
Swan, Robert, North Bay, Ont., travelling expenses	516 60
Swedish Steel & Importing Co., Limited, Montreal, Que., material and supplies	49 20
Swift Canadian Co., Limited, West Toronto, claims	77 68
Swift Refrigerator Line, Chicago, Ill., car service	82 89
Switzer, W., Latchford, Ont., travelling expenses	190 05
Sylvester Manufacturing Co., Limited, Lindsay, Ont., material and supplies	4,245 90
Tallman Brass & Metal Company, Hamilton, Ont., material and supplies..	751 19
Tapp, Charles, North Bay, Ont., award, Workmen's Compensation Board....	50 98
Tassier, A. L., Elk Lake, Ont., material and supplies	65 15
Tatham, G. S., New Liskeard, Ont., claims	38
Taylor & Arnold, Limited, Montreal, P.Q., material and supplies.....	2,717 01
Taylor & Co., Limited, John, Toronto, Ont., material and supplies.....	580 85
Taylor, Archie, Widdifield, Ont., material and supplies	200 00
Taylor Hardware, Limited, Geo., Cobalt, Ont., material and supplies.....	361 05
Taylor, J. H. A., North Bay, Ont., material and supplies.....	10 32
Taylor, Lionel F., North Bay, Ont., travelling expenses	24 70
Taylor, Limited, J. & J., Toronto, Ont., material and supplies.....	431 11
Taylor, Mrs. Nellie E., New Liskeard, Ont., awards, Workmen's Compensation Board	503 47
Taylor, Stanley M., North Bay, Ont., travelling expenses.....	5 50
Taylor, William, Thornloe, Ont., material and supplies	134 85
Talintineo, R., S. Porcupine, Ont., work performed.....	12 00
Teck-Hughes Gold Mines, Limited, Kirkland Lake, Ont., claim	28 80
Telegraph & Telephone Age, New York, N.Y., subscriptions.....	2 00
Temiscouata Railway, Riviere du Loup, Que., car service	35 30
Temiskaming & Northern Ontario Railway Commission, operations account	85,580 10
Temiskaming & Northern Ontario Railway Commission, station outstandings	1,070 87
T. & N. O. Picnic Committee, North Bay, Ont., commission	25 30
Temiskaming & Northern Ontario Railway Telegraph, North Bay, Ont., service	4 26
Temiskaming District Poultry Association, Englehart, Ont., donation.....	5 00
Temiskaming Telephone Company, Limited, New Liskeard, Ont., service..	252 00
Temiskaming Testing Laboratories, Cobalt, Ont., work performed, etc.	39 26
Templeton, Kenly & Co., Ltd., Toronto, Ont., material and supplies.....	1,043 40
Terminal Railroad Association of St. Louis, St. Louis, Mo., car repairs....	30 79
Teskey, H. W., North Bay, Ont., travelling expenses	7 20
Texarkana & Fort Smith Railway Company, Texarkana, Texas, car repairs	6 63
Texas & New Orleans Railroad Company, Houston, Texas, car repairs....	380 29
Texas & Pacific Railway, Dallas, Texas, car service and car repairs.....	258 16
Texas-Mexican Railway Company, Laredo, Texas, car repairs.....	13 94
Thiel Detective Service Co. of Canada, Montreal, Que., services rendered..	181 80
Thomas Company, The, North Bay, Ont., work performed.....	62 00
Thomas, Frederick, North Bay, Ont., awards, Workmen's Compensation Board	172 15
Thomas, N. S., Cochrane, Ont., claim	6 12
Thompson, W. A., North Bay, Ont., travelling expenses	23 65

Thorpe Brothers, New Liskeard, Ont., claims	\$5 55
Tilley, Johnston, Thomson & Parmenter, Toronto, Ont., fee as counsel, etc.	4,810 00
Time Table Distributing Co. of Canada, Limited, St. John, N.B., distributing time-tables	181 05
Timmins, Corporation of the Town of Timmins, Ont., water supplied....	689 29
Timmins, Townsite Co., Timmins, Ont., right of way	150 00
Tisdale, Township of South Porcupine, Ont., claim	2 00
Toledo & Ohio Central Railway, Columbus, Ohio, traffic balances and car repairs	559 12
Toledo, Peoria & Western Railroad, Peoria, Ill., car service and car repairs	41 24
Toledo, St. Louis & Western Railway Company, Chicago, Ill., car service and car repairs	25 37
Toledo Terminal Railroad, Detroit, Mich., car repairs	22 43
Tooele Valley Railway Company, Tooele City, Utah, car repairs.....	5 66
Tomaso, A., North Bay, Ont., travelling expenses.....	37 50
Tomkins, Wm., North Bay, Ont., award, Workmen's Compensation Board..	43 93
Tonopah & Goldfield Railroad, Philadelphia, Pa., traffic balances	23 69
Toronto Daily Star, Toronto, Ont., advertising	13 20
Toronto, Hamilton & Buffalo Railway, Detroit, Mich., traffic balances and car repairs	25,386 44
Toronto Sanitary Towel Supply Co., Toronto, Ont., towel supply	51 00
Toronto Weekly Railway & Steamboat Guide, Limited, Toronto, Ont., subscriptions	6 00
<i>Toronto World</i> , Toronto, Ont., subscriptions	5 00
Town, Thomas G., Englehart, Ont., travelling expenses	11 50
Traffic Bureau, Chicago, Ill., subscriptions	10 00
Transcontinental Freight Bureau, Chicago, Ill., tariffs	75 22
Transit Co., Limited, Toronto, Ont., car service	92 44
Travelers Insurance Company, Hartford, Conn., traffic balances	18 30
Trethewey Silver-Cobalt Mine, Limited, Cobalt, Ont., claim	88 80
Tremont & Gulf Railway Company, Winnfield, La., car service	6 60
Trebilcock, Dr. Frank C., Toronto, Ont., services rendered.....	6 00
Trinity & Brazos Valley Railroad, Houston, Texas, car service and car repairs	20 38
Tuco Products Corporation, New York, N.Y., material and supplies.....	71 31
Turner & Sons, Limited, J. J., Peterborough, Ont., material and supplies....	52 81
Ulster & Delaware Railroad, Kingston, N.Y., car service	12 90
Underhill Coal & Coke, Limited, Toronto, Ont., coal	230 85
Underhill Coal Company, Buffalo, N.Y., coal	575 71
Union Railroad Company, Pittsburg, Pa., car service and car repairs.....	242 18
United States Coal & Coke Company, Pittsburg, Pa., car service.....	1 52
United States Steel Products Company, New York, N.Y., material and supplies	5,613 34
United Typewriter Company, Limited, Toronto, Ont., material and supplies	1,801 94
Union Coal Co., Ltd., Timmins, Ont., material and supplies.....	11 00
Union Foundry Works, Chicago, Ill., material and supplies	111 65
Union Pacific Railroad Company, Omaha, Neb., traffic balances and car repairs	1,705 64
Union Railway Company, Memphis, Tenn., car service and car repairs....	79 85
Union Tank Line, New York, N.Y., car service	32 89
Vallee, A., Cochrane, Ont., claim	8 75
Valley Camp Coal Company, Cleveland, Ohio, coal	5,838 02
Van Russell Bros., Cochrane, Ont., work performed.....	22,615 02
Vanstone, A., North Bay, Ont., travelling expenses.....	1 80
Vapor Car Heating Company of Canada, Limited, Montreal, P.Q., material and supplies	119 28
Veltri, Geo., North Bay, Ont., award, Workmen's Compensation Board	12 30
Veraldi, S., North Bay, Ont., work performed	1,990 62
Vicksburg Shreveport & Pacific Railway Co., New Orleans, La., traffic balances and car repairs	18 11
Virginia Railway Company, Norfolk, Va., car service and car repairs....	94 16
Wabash-Pittsburg Terminal Railway, Pittsburg, Pa., car service.....	13 20
Wabash Railroad, St. Louis, Mo., traffic balances and car repairs.....	6,776 43
Wabi Iron Works, Limited, New Liskeard, Ont., material and supplies....	185 10
Wagar Furniture Company, North Bay, Ont., material and supplies.....	686 50
Wagenblass, F., North Bay, Ont., travelling expenses	1 75

Wagner Electric Manufacturing Co. of Canada, Limited, St. Louis, Mo., material and supplies	\$5 05
Walbourn & Davidson, North Bay, Ont., material and supplies.....	13 77
Walker, Leslie, Mattagami Heights, Ont., claims	11 02
Wallace & Son, R., North Bay, Ont., material and supplies	7 50
Walter, G., North Bay, Ont., travelling expenses	10 50
Warner, E. C., Cobalt, Ont., claim	3 94
Warrell & Yates, Cochrane, Ont., claims	2 34
Warwick Bros., & Rutter, Limited, Toronto, material and supplies.....	1,970 17
Washington Coal & Coke Company, Dawson, Pa., car service.....	3 10
Washington Southern Railway Company, Richmond, Va., car repairs.....	1 22
Waterloo, Cedar Falls & Northern Railroad, Waterloo, Iowa, car repairs..	8 22
Watson, C. G., North Bay, Ont., travelling expenses	9 25
Watson Company, Limited, The, New Liskeard, Ont., claims.....	74 72
Watson, Jack & Company, Limited, Montreal, Que., material and supplies..	340 33
Watt, William, Monteith, Ont., material and supplies	141 45
Watts, A., Monteith, Ont., claims	8 10
Weaver Coal Company, Limited, F. P., Montreal, Que., claims.....	183 04
Weiss, F., North Bay, Ont., travelling expenses.....	1 50
Welbourn, J. T., Uno Park, Ont., claims	1 17
Welch, Edgar T., Westfield, N.Y., claim	61 25
Welsh, H., Cobalt, Ont., claim	10 00
Welding & Supplies Co., Montreal, Que., material and supplies.....	102 67
Welland Vale Manufacturing Co., Limited, St. Catharines, Ont., material and supplies	302 90
Wells Brothers Company of Canada, Limited, Galt, Ont., material and supplies	13 17
West Side Belt Railroad, Pittsburg, Pa., traffic balances and car repairs....	29 27
West, Stephen, Thornloe, Ont., material and supplies	61 00
Western Canada Flour Mills Co., Limited, Toronto, Ont., claim.....	10 30
Western Maryland Railroad, Baltimore, Md., traffic balances and car repairs	764 95
Western Pacific Railroad Company, San Francisco, Cal., traffic balances and car repairs	374 15
Western Passenger Bureau, Chicago, Ill., tariffs	9 50
Western Railway of Alabama, Atlanta, Ga., car service and car repairs....	14 35
Western Trunk Line Committee, Chicago, Ill., tariffs	35 83
Westmoreland Coal Co., Philadelphia, Pa., car service	28 39
Wettlaufer Brothers, Toronto, Ont., material and supplies.....	10 00
Wharton, P. J., Cochrane, Ont., travelling expenses	38 00
Wheeling & Lake Erie Railroad, Pittsburg, Pa., traffic balances and car repairs	1,435 61
White, Leslie Thomas, Englehart, Ont., award, Workmen's Compensation Board	42 30
White, Peter, New Liskeard, Ont., award, Workmen's Compensation Board	91 97
White River Steamboat Line, New Liskeard, Ont., material and supplies..	1,404 43
Whitman & Barnes Manufacturing Company, St. Catharines, Ont., material and supplies	822 07
Whitton, John, Monteith, Ont., material and supplies	11 30
Wichita Falls & North Western Railway, Wichita Falls, Texas, car repairs	14 52
Wichita Valley Railway, Fort Worth, Texas, car repairs.....	23 15
Wickberg, Gus, Bourkes, Ont., material and supplies	30 00
Wiedeke, Gustav, Dayton, Ohio, material and supplies	39 36
Wild & Company, Joseph, New York, N.Y., material and supplies.....	143 06
Wildbur, Geo., Earlton, Ont., award, Workmen's Compensation Board	26 40
Williams & Wilson, Limited, Montreal, Que., material and supplies.....	2,069 49
Williams, H. N., Englehart, Ont., material and supplies	12 16
Williams Machinery Company, Limited, A. R., Toronto, Ont., material and supplies	16 80
Willis, J. B., North Bay, Ont., travelling expenses	207 10
Willoughby, E., North Bay, Ont., travelling expenses.....	91 89
Wilson Brothers, Cochrane, Ont., work performed	7 00
Wing, Jung, Timmins, Ont., laundry	86 18
Wilson & Company, Andrew, Toronto, Ont., claim	19 95
Wilson Brothers, Cobalt, Ont., work performed	17 50
Wilson, J. B., Toronto, Ont., material and supplies	82 00
Winnishimer, P., McCool, Ont., material and supplies	12 55
Winston Salem Southbound Railway Co., Wilmington, N.C., car service....	9 90
Wismer, C. A., New Liskeard, Ont., claims	19 05
Wolfe, Philip D., North Cobalt, Ont., award, Workmen's Compensation Board	19 01

Wood, Alexander & James, Hamilton, Ont., material and supplies.....	\$767 15
Woods, R. R., New Liskeard, Ont., claims	27 95
Woods Manufacturing Co., Limited, Ottawa, Ont., material and supplies..	200 00
Woolings, Thos. S., Englehart, Ont., claims	272 00
Work & Fretz, Detroit, Mich., claims	130 69
Workmen's Compensation Board, Toronto, Ont., assessment.....	151 49
World's Only Dustless Brush Company, North Bay, Ont., brushes.....	21 00
Wright, C. W., Englehart, Ont., travelling expenses.....	4 00
Wright Company, Limited, E. G., Hamilton, Ont., material and supplies....	181 46
Wrightsville & Tennille Railroad Company, Savannah, Ga., car service....	5 40
Yale & Towne Manufacturing Company, Stamford, Conn., material and supplies	79 97
Yates Company, W. J., New Liskeard, Ont., claims	21 53
Young Lumber Company, North Bay, Ont., material and supplies.....	2,256 55
Young, Murray, Cochrane, Ont., award, Workmen's Compensation Board..	5 00
Young, Richard H., Heaslip, Ont., material and supplies.....	71 90
Young, William, North Bay, Ont., travelling expenses.....	59 95
Young & Ball, Kenabeek, Ont., material and supplies	1,128 90
Zelnicker Supply Company, Walter A., St. Louis, Mo., material and supplies	26 40
	<hr/>
	\$5,166,936 77

RECAPITULATION ACCOUNTS PAYABLE.

November 1st, 1919, to October 31st, 1920.

General ledger balance as of November 1st, 1919.....	\$478,557 74	
Disbursements for year, November 1st, 1919, to October 31st, 1920, as per detailed statement.....		5,166,936 77
Cash payments by Treasurer during year.....	\$4,921,588 89	
Registration prior to October 31st, 1919, cancelled.....	68 17	
General ledger balance, as of October 31st, 1920.....	723,837 45	
	<hr/>	<hr/>
	\$5,645,494 51	\$5,645,494 51

W. H. MAUND,
Secretary-Treasurer.

GEO. W. LEE,
Chairman.

NIPISSING CENTRAL RAILWAY COMPANY

Mileage:

There has been no change in the main track mileage and but slight changes in the mileage of sidings during the fiscal year.

The mileage operated is as follows:

Main Track.

Owned and maintained by Company	4.92 miles
Leased from T.N.O. Railway; maintained by Company..	5.28 "
Maintained by Commission	5.17 "
	—————15.37 miles

Sidings and Spurs.

Sidings on that part of the line owned by T.N.O. Railway:	
Yards, tracks and sidings	1.65 miles
Private sidings	1.12 "
	————— 2.77 miles
Sidings on that part of the line owned by N.C. Railway:	
Yard, tracks and sidings	1.98 miles
Private sidings .....	.11 "
	————— 2.09 miles

Total track 20.23 miles

Equipment:

Rolling stock consists of the following:

Ten electric motor passenger cars, one combination switching locomotive, express car, and snow plow; one motor-driven snow plow; two freight cars.

Additions to Road and Equipment:

A siding, 208 feet long, was constructed near the south end of Cobalt Lake, for the Right-of-Way Mines Limited, for the handling of ore.

Two sidings were constructed on the Kerr Lake Branch for the handling of ore. One, 301.5 feet long, at mileage 3.6, for the La Rose Mines Limited, and the other, 202 feet long, at mileage 3.9, for the Mining Corporation of Canada.

There is now under construction, at mileage 3.8, Kerr Lake Branch, a siding approximately 1,500 feet long, for the Bailey Silver Mines Limited, for the handling of ore.

A tool house, 14 feet by 16 feet, was erected at North Cobalt for the use of the trackmen.

There were no additions made to equipment during the year.

Maintenance:

The property of the Company was kept in good condition during the year.

COUNSEL'S REPORT

Litigation:

At the end of the financial year there were no actions pending in which the Nipissing Central was plaintiff. The only action in which the Company was defendant is that instituted by Mrs. Anges Andresimitz for damages for personal injuries. Action standing for trial.

Damage Claims:

A number of claims, including some for personal injuries, were made during the year. Some have been settled and others abandoned, and save as mentioned above, in no case has a writ been issued.

Leases, Agreements, Contracts, Etc.:

As usual, a number of agreements, contracts and leases, and other documents, covering various miscellaneous matters between the Company and others, have been prepared and executed.

Miscellaneous:

Numerous questions on various subjects affecting the Nipissing Central Railway and the T.N.O. Railway Commission have arisen during the year calling for the consideration of the legal department.

COMPARATIVE STATEMENT OF EARNINGS, EXPENDITURES AND RESULT OF OPERATION, NOVEMBER 1ST, 1918, TO OCTOBER 31ST, 1920

Receipts	Nov. 1, 1919-Oct. 31, 1920		Nov. 1, 1918-Oct. 31, 1919	
Revenue from Transportation.....	116,568 88		106,700 74	
Incidental to Transportation	3,781 00		2,177 40	
Total Revenue.....	120,349 88		108,878 14	
Expenditures	Per ct.	\$ c.	\$ c.	Per ct.
Way and Structures	20.3	24,407 19	22,216 98	20.4
Equipment	23.7	28,498 72	14,800 47	13.6
Power.....	18.7	22,514 26	19,738 12	18.1
Conducting Transportation.....	39.5	47,519 70	37,196 19	34.2
Traffic			24 60	.....
General and Miscellaneous.....	9.3	11,271 83	8,163 75	7.5
Total Operating Expenses.....	111.5	134,211 70	102,140 11	93.8
Balance		Dr. 13,861 82	6,738 03	.....
Deductions from Income		10,206 37	10,009 77	.....
Net Result		Dr. 24,068 19	Dr. 3,271 74	.....

MISCELLANEOUS STATISTICS.

	Nov. 1st, 1919 to Oct. 31st, 1920.	Nov. 1st, 1918 to Oct. 31st, 1919.
Passenger Car Hours	27,537	28,237
Passenger Car Miles	282,015	289,143
Total Passengers Carried	1,304,244	1,204,232
Average Daily Receipts	\$318 49	\$292 33
Average Receipts per Car Hour—Passenger.....	3.80.	3.48.3
Average Receipts per Car Mile—Passenger.....	.37.1	.33.8
Earnings per Passenger .....	.08.	.08.1

STATEMENT SHOWING INVESTMENT IN ROAD AND EQUIPMENT.

November 1st, 1919, to October 31st, 1920.

Paving ..	\$1,089 33	
Track and roadway labour	342 76Cr.	
Distribution system	82 86	
Stations, miscellaneous buildings and structures.....	1,803 30	
Shop equipment	37 97	
Passenger and combination cars	11,913 14	
Service equipment	1,693 05	
		\$16,276 89
Details of Charges:—		
ROAD.		
Raising tracks and macadamizing of Armstrong Street, New Liskeard	\$1,089 33	
Siding—Mining Corporation of Canada, Ltd., Kerr Lake branch ..	342 76Cr.	
Additional lightning arrestors and feeder taps on distribution system, New Liskeard-Kerr Lake	82 86	
Residence—local superintendent	1,803 30	
Additional shop equipment	37 97	
		\$2,670 70
EQUIPMENT.		
Betterments to passenger cars	\$11,913 14	
Snow plow	1,693 05	
		\$13,606 19
		\$16,276 89

NIPISSING CENTRAL RAILWAY

EXPENDITURE FOR FISCAL YEAR, 1920

Bailey Silver Mines, Ltd., Cobalt, Ont., material and supplies	\$144 00
Bauldry, W. J., North Cobalt, Ont., expenses re townsites	4 90
Beaver Consolidated Mines, Ltd., Cobalt, Ont., material and supplies	94 00
Begg Bros., North Bay, Ont., material and supplies	12 50
Benjamin Electric Manufacturing Co., of Canada, Ltd., Toronto, Ont., material and supplies	54 09
Brewer, George L., Cobalt, Ont., material and supplies	16 22
Brill, The J. G. Co., Philadelphia, Pa., material and supplies	63 25
Bucke, Municipal Corporation of Township of Haileybury, Ont., taxes	17 41
Campbell, H. S., North Bay, Ont., material and supplies	55
Canada Iron Foundries, Ltd., Montreal, Que., material and supplies.....	448 80
Canada Metal Co., Ltd., Toronto, Ont., material and supplies	33 32
Canada Paint Co., Ltd., Montreal, Que., material and supplies	45 08
Canada Wire & Cable Co., Ltd., Toronto, Ont., material and supplies	995 00
Canadian Bronze, Ltd., New York, N.Y., material and supplies	320 87
Canadian Express Co., North Bay, Ont., express charges	30 50
Canadian General Electric Co., Ltd., Toronto, Ont., material and supplies ..	2,331 45
Canadian H. W. Johns-Manville Co., Ltd., Toronto, Ont., material and supplies ..	4 50
Canadian National Express Co., North Bay, Ont., express charges	2 52
Canadian Steel Tire & Wheel Co., Limited, Montreal, Que., material and supplies ..	447 69
Canadian Westinghouse Co., Ltd., Hamilton, Ont., material and supplies....	6,689 36
Cobalt Daily Nugget, Ltd., Cobalt, Ont., advertising	29 25
Cochrane Hardware, Ltd., North Bay, Ont., material and supplies	35 91
Coleman Fare Box Co., Toronto, Ont., material and supplies, etc.	67 52
Coo, W. C., Toronto, Ont., services rendered	1 00
Courtmarche, Charles, North Cobalt, Ont., rental post office drawer	4 00
Crowse-Hinds Company of Canada, Ltd., Toronto, Ont., material and supplies ..	119 53
Department of Inland Revenue, Ottawa, Ont., tax	6 15
Disston & Sons, Ltd., H., Toronto, Ont., material and supplies	5 18
Dodge Manufacturing Co., Ltd., Toronto, Ont., material and supplies.....	5 00
Dominion Brake Shoe Co., Ltd., Montreal, Que., material and supplies	717 35
Dominion Envelope & Carton Co., Ltd., Toronto, Ont., material and supplies ..	74 41
Dominion Express Co., North Bay, Ont., express charges	20 15
Dominion Foundries & Steel, Ltd., Hamilton, Ont., material and supplies...	73 09
Dominion Linens, Ltd., Guelph, Ont., material and supplies	17 70
Dominion Wheel & Foundries, Ltd., Toronto, Ont., material and supplies...	17 01
Duncan, Frank W., North Bay, Ont., material and supplies	1,430 00
Earll, Charles I., York, Pa., material and supplies	81 40
<i>Electric Railway Journal</i> , New York, N.Y., subscription	5 50
Ferguson, C. L., North Bay, Ont., payrolls	60,879 31
Fleming & Co., P. M., Haileybury, Ont., services rendered	2 50
Freeman, A., North Bay, Ont., travelling expenses	1 05
General Supply Co. of Canada, Ltd., Ottawa, Ont., material and supplies ..	5 65
Gibson, F. R., Haileybury, Ont., services rendered	80 50
Greening Wire Co., Ltd., Hamilton, Ont., material and supplies	46 66
Hamilton Stamp & Stencil Works, Ltd., Hamilton, Ont., material and supplies ..	1 04
Hunt & Co., Ltd., Robert H., Montreal, Que., services rendered	1 20
Hurley Printing Co., Ltd., Brantford, Ont., material and supplies	130 00
Hydro-Electric Power Commission, Toronto, Ont., material and supplies ..	343 22
Imperial Oil, Ltd., Toronto, Ont., material and supplies	452 73
International Business Machine Co., Ltd., Toronto, Ont., material and supplies ..	2 70
International Register Co., Chicago, Ill., material and supplies	61 47
Jackson Press, Kingston, Ont., material and supplies	195 96
Kerry & Chace, Ltd., Toronto, Ont., services rendered	486 13
Lewis, W. H., Haileybury, Ont., services rendered	3 30
London Free Press Printing Co., Ltd., London, Ont., advertising	6 20
Lyman Tube & Supply Co., Ltd., Montreal, Que., material and supplies....	3,223 91
Meagher, G. J., Haileybury, Ont., services rendered	19 00
Meakins & Sons., Ltd., Hamilton, Ont., material and supplies.....	17 95
Monarch Metal Co., Ltd., Hamilton, Ont., material and supplies	23 88

Montreal Star Publishing Co., Ltd., Montreal, Que., advertising	\$10 38
Morrow Screw & Nut Co., Ltd., Ingersoll, Ont., material and supplies	24 79
Murray, D. R., North Cobalt, Ont., telephone services	10 50
McBride, J. Homer, Flint, Mich., services rendered	5 00
McDonald, K., North Cobalt, Ont., house and lot, North Cobalt	1,800 00
McKee, David A., Haileybury, Ont., award, Workmen's Compensation Board	86 88
McKnight, W., New Liskeard, Ont., material and supplies	1,054 00
McMurphy, Dr. A., North Bay, Ont., services rendered	10 00
National Drug & Chemical Co. of Canada, Ltd., Toronto, Ont., material and supplies	25 40
National Equipment Co., Ltd., Toronto, Ont., material and supplies	3 15
National Grocers, Ltd., North Bay, Ont., material and supplies	8 65
New Liskeard, Corporation of the Town of, New Liskeard, Ont., taxes	1,589 33
Nicholson File Co., Port Hope, Ont., material and supplies	29 28
Northern Canada Supply Co., Ltd., Cobalt, Ont., material and supplies	17 59
Northern Electric Manufacturing Co., Ltd., Toronto, Ont., material and supplies ..	65 25
Northern Lumber Mills, Ltd., North Cobalt, Ont., material and supplies ...	4 18
Northern Ontario Light & Power Co., Ltd., Cobalt, Ont., current supplied..	18,676 66
Ohio Brass Co., Mansfield, Ohio, material and supplies	213 41
Oster Manufacturing Co., Cleveland, Ohio, material and supplies.....	4 75
Page-Hersey Iron Tube & Lead Co., Ltd., Toronto, Ont., material and supplies	94 04
Phillips Electrical Works, Ltd., Montreal, Que., material and supplies	12 32
Pilkington Bros., Ltd., Toronto, Ont., material and supplies	161 06
Poppleton, George, Haileybury, Ont., material and supplies	3 00
Pratt & Whitney Co. of Canada, Ltd., Dundas, Ont., material and supplies..	31 47
<i>Railway Electrical Engineer</i> , New York, N.Y., subscription	2 00
Rice, Lewis & Son, Ltd., Toronto, Ont., material and supplies	26 57
Richardson, Bond & Wright, Ltd., Owen Sound, Ont., material and supplies..	102 80
Russell Car & Snow Plow Co., Ridgway, Pa., material and supplies	46 85
Sampson Cordage Works, Boston, Mass., material and supplies	79 20
Scully, William, Montreal, Que., material and supplies	120 55
Scythes & Co., Ltd., Toronto, Ont., material and supplies	7 68
Smiley, F. L., Haileybury, Ont., services rendered	175 69
Smith, Mrs. Emelia, Cobalt, Ont., donation	100 00
Smith, Peter, Heater Co., Detroit, Mich., material and supplies	450 75
Southam Press, Ltd., Toronto, Ont., material and supplies	103 30
Standard Steel Works Co., Philadelphia, Pa., material and supplies	19 62
Steel Co. of Canada, Ltd., Hamilton, Ont., material and supplies	24 69
Strong Drug Co., Ltd., Haileybury, Ont., material and supplies	2 75
Taylor, Dr. W. O., Cobalt, Ont., services rendered	14 00
Temiskaming & Northern Ontario Railway Commission, Toronto, Ont., rental facilities, supplies, etc.	57,091 91
Temiskaming Telephone Co., Ltd., New Liskeard, Ont., services rendered ..	111 95
<i>Toronto Daily Star</i> , Toronto, Ont., advertising	4 35
Wabi Iron Works, Ltd., New Liskeard, Ont., material and supplies.....	472 97
Warwick Bros. & Rutter, Ltd., Toronto, Ont., material and supplies.....	7 07
Whitman & Barnes Manufacturing Co., Ltd., St. Catharines, Ont., material and supplies	98
Workmen's Compensation Board, Toronto, Ont., assessment.....	2 10
	<hr/>
	\$163,359 39

RECAPITULATION ACCOUNTS PAYABLE.

November 1st, 1919, to October 31st, 1920.

General ledger balance as of November 1st, 1919	\$50,763 86	
Disbursements as per detailed statement	163,359 39	
Cash payments by Treasurer	\$178,690 13	
General ledger balance as of October 31st, 1920	35,433 12	
	<hr/>	
	\$214,123 25	\$214,123 25

W. H. MAUND,
Secretary-Treasurer.

GEO. W. LEE,
President.

TEMISKAMING TESTING LABORATORIES—GENERAL BALANCE SHEET, October 31st, 1920

ASSETS.		LIABILITIES.	
Property Owned:		T. & N. O. Railway, Advance	\$32,250 56
Mill Building	\$13,220 24	Working Liabilities:	
Mill Equipment	9,508 71	Audited Accounts	2,423 60
Assay Building	990 35	Deferred Credit Items:	
Assay Equipment	1,225 42	Accrued Depreciation on Plant and Equipment	2,655 12
Bullion Building	307 26		
Bullion Equipment	111 52		
	\$25,363 50		
Working Assets:			
Cash	598 89		
Accounts Collectible	5,181 86		
Material on Hand	1,446 43		
	7,227 18		
Deferred Debit Items:			
Insurance Paid in Advance	544 52		
Petty Account Advance	75 00		
	619 52		
Profit and Loss Balance:			
(Deficit from Operation, May 8, 1919, to October 31, 1920)	4,119 08		
	\$37,329 28		\$37,329 28

STATEMENT EARNINGS AND EXPENDITURES, MAY 8, 1919, TO OCTOBER 31, 1920.

Receipts:

Assay Earnings	\$15,574 29
Mill Earnings	18,703 08
Bullion Earnings	976 06

Total Earnings \$35,253 43

Expenditures:

Assay Expenses	\$15,394 87
Mill Expenses	19,754 77
Bullion Expenses	573 30
General Expenses	3,649 57

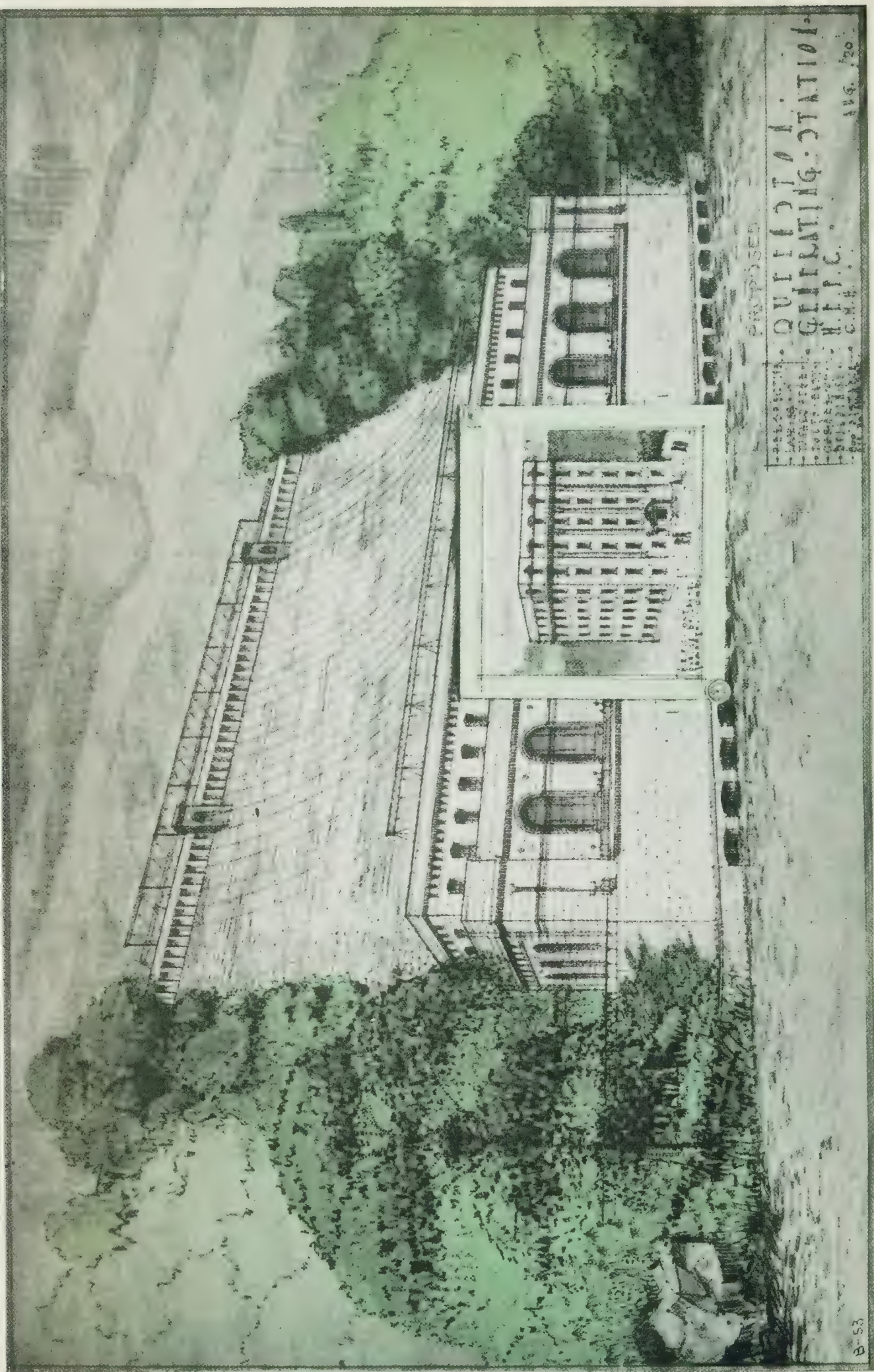
Total Expenditures \$39,372 51

Net Result \$4,119 08 Dr.

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QUEENSTON GENERATING STATION (PROPOSED)

This view shows an inset of the Commission's Administration Building in Toronto drawn to the same scale, thus giving a realistic impression of the vast size of this structure.

Thirteenth Annual Report
OF THE
HYDRO-ELECTRIC POWER
COMMISSION

OF THE
PROVINCE OF ONTARIO
FOR THE YEAR ENDED OCTOBER 31st

1920

VOLUME I

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

Printed and Published by CLARKSON W. JAMES, Printer to the King's Most Excellent Majesty

1921

Printed by
THE RYERSON PRESS.

To His Honour, THE HONOURABLE LIONEL H. CLARKE,

Lieutenant-Governor of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honor to present to your Honour Volume I of the Thirteenth Annual Report of the Hydro-Electric Power Commission of Ontario, for the fiscal year ending October 31st, 1920.

The Annual Report for this year is submitted by the Commission with a feeling of great satisfaction in the knowledge that the results of the year's operations have been the most successful in the history of the Commission.

Throughout the year, the country has been passing through a prolonged period of readjustment, following the great war, and commercial conditions, in many parts of the Province, have, as yet, not become normal. In some of the municipalities, many industries are entirely closed down waiting for a readjustment of the cost of materials and labor before resuming normal production. This business depression mostly affected the Eugenia and Severn Systems, especially the latter, where a number of large industries have not yet commenced operating on normal lines of business, with a consequent reduction in load used by the municipalities on the Severn System, and, a corresponding reduction in load previously purchased from the Eugenia System, thereby reducing the revenue formerly obtained by that system.

The Niagara System is larger than the other systems, and the loss experienced by the dropping off of certain kinds of industries did not as seriously affect the revenue of this system, as was the case with the smaller systems, and the general growth in business in the municipalities on this system more than compensated for the loss of such industries, as were particularly affected during the readjustment period, and the general growth in business on the system was such that toward the end of the year, there was not a sufficient supply of power to meet the demand. This was due, in most part, to the expiration of a contract for a supply of a block of power assumed by the Commission at the time of purchase of the assets of the Ontario Power Company of Niagara Falls. This shortage in power supply greatly handicapped the municipalities on this system, and many of the municipalities were unable to obtain sufficient power to meet the demands of their old customers, and prevented the taking on of much new business, that under normal conditions would have been obtained.

Owing to the abnormal increase in the cost of labor and materials, it was necessary, at the beginning of the year, to increase the rates charged to a number of the smaller municipalities, on this system, but, I am pleased to report that the general increase in business, especially in the smaller municipalities, where it was necessary to make these increases, has resulted in an increase in revenue

sufficient to offset this increased cost of power, so that after meeting all operating costs, the operation of practically every municipality on the system showed a net surplus. The successful operation of the municipalities of the various systems is even more marked when it is borne in mind that the cost of labor and material was maintained at the extremely high level caused by war conditions for practically the entire year. It was only toward the end of the year that the cost of material showed any appreciable tendency to drop; the cost of labor being maintained at an unprecedented high figure throughout the entire year. While the cost of labor throughout the year did not decrease, the efficiency of labor commenced to increase very considerably about the middle of the year, which resulted in a considerable saving to every municipality supplied.

At the beginning of the year, the Commission fixed a schedule of rates to cover the estimated cost of service to all municipalities. The total revenue for the year, under these rates, was \$4,513,404.33, while the cost of service made up of the cost of power, interest, depreciation and maintenance, was \$3,946,132.91, and the necessary fixed charges and renewals, including sinking fund, reserves for renewals and contingencies amounted to \$714,735.61. After meeting all operating expenses, and setting aside the reserves, as above set out (in accordance with Section 23 of the Power Commission Act) the expenditures exceeded the revenue by \$147,464.19; the cost of service to all municipalities exceeding the estimates for the year by only 3.16 per cent., which is a very creditable showing in view of the continued high cost of labor and materials throughout the entire year. Bills and credit memoranda have been forwarded to all municipalities for the difference between the actual cost of service and the power bills, as rendered, which have already been taken up and incorporated in the books of the municipalities, so that the Commission's balance sheet shows neither "Profit" nor "Loss."

NIAGARA SYSTEM

From the beginning of the year, the loads of the various municipalities on the system began to increase considerably, owing to many factories again having resumed operations on commercial lines, after having been previously engaged in the manufacture of war munitions, which loads dropped off early in 1919. The demands of the municipalities on the system for power became so great during the year, that the Commission was unable to obtain sufficient power to meet all of its requirements during peak load hours, and, the municipalities on this account were unable to supply all of the requirements of their customers, with a consequent reduction in revenue to the Commission from the municipalities supplied, and a corresponding loss in revenue to the municipalities from the customers, whose loads it was necessary to restrict.

About the middle of the year, arrangements were made with the Canadian-Niagara Power Company, whereby the Commission obtained an additional supply of 9,000 horsepower. This additional power was of great assistance in meeting the requirements of the municipalities, although, the loads of all of the municipalities had to be restricted, especially towards the end of the year when the power and lighting peaks became coincident.

Throughout the year, the Commission has been endeavoring to arrange for an additional power supply, and, at the time of writing, a second additional block of power has been arranged for with the Canadian-Niagara Power Company, which has helped very materially in meeting the requirements of the municipalities.

Notwithstanding the severe commercial depression that has continued throughout the year, the financial operating statement for the system shows a remarkably successful financial condition in all the municipalities on the system, with regard to the operation of their own distribution systems. Out of the 127 municipalities, as shown in the operating report for this system, all have been able to meet their operating expenses, as well as to set aside a sufficient fund for depreciation, leaving, in each case, a very handsome net surplus, with the exception of seven of the smaller municipalities in which local conditions, due to the financial depression, have affected their industries, which, of course, seriously affected the revenue from their power customers, and four townships, which have been seriously handicapped through shortage of power supply during the year, owing to the fact that they have been unable to take on additional customers on their existing systems, and, in the smaller municipalities on this system, where the cost of power ranges between \$50.00 and \$85.00 per horsepower per year, the operation on their systems show, without an exception, a net surplus for the year's operation.

Queenston-Chippawa Development

During the year, work on the Queenston-Chippawa Development was carried on, as outlined in last year's Report. Considerable trouble was experienced throughout the entire year regarding the supply of common labor, the demand greatly exceeding the supply. For about three months of the year, the construction work was greatly impeded by unsettled labor conditions, and the work was completely shut down for one month on account of a strike. This resulted in a loss of over \$600,000.00 in non-productive overhead, and additional fixed charges due to delay in completion of the work, and, in order to finish the undertaking on schedule time, extra equipment had also to be purchased to compensate, as far as possible, for the time lost in the progress of the work.

During the year, the Commission has contracted for three complete additional generating units, so that the initial installation in the plant will be five units instead of two, as originally intended, which increased capacity will, it is expected, take care of the power requirements of the district for some time to come.

This development is being constructed so as to utilize the total possible head between Lake Erie and Lake Ontario, the total construction head of the plant being 305 feet. The generators are the largest units of their kind in the world, each having a capacity of 55,000 horsepower.

With the added assistance of additional equipment purchased during the year, the construction work is progressing at a very rapid rate. The electrically operated shovels are making a world's record in the removal of earth and rock which is being excavated and disposed of at a rate of one-half million cubic yards per month, and, at the present rate of progress, all the excavation work in the canal proper should be completed by the month of June, 1921.

At the time of writing, the progress on construction work is well in advance of the estimated schedule and with a continuance of this pleasing progress it is expected that the canal will be completed, and the first two generating units in operation, ready to deliver 100,000 horsepower in September, 1921. One turbine has already been erected and is ready for the assembly of the generator, which generators are so large that it is necessary to assemble them at the plant. The second turbine is now being delivered and its installation will commence at once.

The construction work of the power house is well under way, the sub-structure of the building being already completed, and the concrete walls are being poured, and work has already been commenced on the construction of the roof of the building.

EUGENIA SYSTEM

The power demands of the various municipalities supplied on this system remained practically unchanged throughout the year, although, the market for surplus power, which, during the two previous years, was sold to the Severn System, practically ceased entirely. The maintaining of demands equal to those of previous years may be considered a very creditable showing on this system, due to the fact that readjustment of industry from war to normal conditions resulted in the reduction of power loads in nearly all other localities.

During the year, the work of constructing transmission lines and stations to supply a number of additional municipalities in Bruce County has been proceeded with at a rapid pace, and the demands of these municipalities, when connected to the system, will more than compensate for the loss in the power loads supplied to the Severn System to supply industries engaged on war work during the past two years, and, these additional loads will, during the coming year, require the entire output of the Eugenia Development.

The operating report on this system clearly indicates the effect of the loss of the sale of power to the Severn System, previously mentioned, and, for this reason, as well as the loss of a large power load, the total revenue obtained for power supplied on the system was considerably less than it otherwise would have been had this load reduction not taken place.

The financial standing of the system for the year was further affected by the large increase in capital, due to the installation of an additional generating unit in the power plant, and other improvements at the generating station to take care of the prospective loads, already referred to, which additions resulted in a corresponding increase in the interest charges for the year. With the addition of the five municipalities, previously referred to, and a large new industry, which will require a considerable block of power during the coming year, and, also, with the additional loads required by new industries in Hanover, Owen Sound and other municipalities on the system, a demand will be created on the generating plant that will enable this system, in future, to meet all expenses and wipe out the small shortage that has been created during the present year's operation.

WASDELL'S SYSTEM

The results of the year's operation on the Wasdell's System were not affected by the readjustment of industry and manufacturing from war to normal conditions as the district served is essentially an agricultural zone. One large industry was added as a power customer increasing the total amount of power transmitted over the system by approximately 75 per cent. A slight increase in load in the various towns served was also obtained due to the addition of small power customers and additional lighting demand. This system suffered somewhat by a loss of a portion of its market in connection with power sold to the Severn System, but the indications of the coming year are favourable for the sale of all surplus power to that district, as well as an increase in demand for power to be supplied to rural districts adjacent to the municipalities of Beaverton, Cannington and Sunderland, and, also, for additional load to be taken by a large customer

at Kirkfield. A special effort was made to give service to the farms located in various townships in Wasdell's District, and considerable detailed work was done for this purpose.

The operating report of this system also shows the effect of the loss of the sale of power to the Severn System. The operating report shows an increase in capital of \$55,899.38, due to the construction of a transmission line from Gamebridge to Kirkfield to serve a large power customer; and, also, due to changing the conductor from the generating station to Beaverton from "steel" to "aluminum." These changes also account for a corresponding increase in interest charges amounting to approximately 34 per cent. over the previous year. As there is every evidence of the load increasing on the Severn System during the coming year, the Wasdell's System will be enabled to market its surplus power in that district, and thereby secure additional revenue. A large new industry is locating on the system, which, together with prospects of sale of power to rural districts, will require the full capacity of the Wasdell's Generating Station, and both increase the revenue on this system and provide for taking care of deficits, which have occurred in the past, and, at the time of writing, the operating conditions on this system show a marked improvement.

SEVERN SYSTEM

The district served by the Severn System was somewhat affected during the year by the general depression of industrial production, due to readjustment from war to normal conditions; consequently, the demand for power was not as great as in previous years. This falling off in load did not, however, affect the system seriously, due to the fact that in previous years the power sold was considerably in excess of the capacity of the Big Chute Generating Plant, and, as this excess was obtained from surplus power available on both the Eugenia and Wasdell's Systems, the Big Chute Plant was kept loaded nearly to capacity throughout the year. Due to the unsettled financial and industrial conditions prevailing during the year, new loads did not come on the system as rapidly as anticipated, the greatest decrease in load being at Collingwood. A large off-peak customer in this municipality discontinued the use of a large block of power entirely, thereby very materially reducing the Collingwood revenue. In addition to the dropping off in load, due to general financial depression, four additional towns on the system commenced to pay sinking fund, which further increased the operating cost of the system for the year, with a result that sufficient charges were not made to this municipality to meet the cost of power supplied. The indications at the close of the year, however, give evidence of a much greater load on the system during the coming year, so much so, in fact, that either a new source of power will have to be provided, or provisions made for obtaining power from either the Niagara, Eugenia or Wasdell's Systems, to take care of the requirements of the system.

THUNDER BAY SYSTEM

This district, at the present time, supplies only one municipality, the City of Port Arthur.

The City of Fort William, however, has signed a contract with the Commission, and will, it is expected, commence taking power from the new Nipigon Plant, in the near future.

The construction of a new generating plant at Cameron's Falls, as well as the connecting transmission line to Port Arthur, proceeded very favourably during the year, and, it is expected that this plant will be completed before the expiration of the Commission's contract for power supply from the Kaministiquia Power Company early during the coming year. The work of constructing this plant was held up considerably on account of adverse conditions of labor and material, with a consequent increase in capital cost, and, as the Commission was advised by the Kaministiquia Power Company that its contract could not be temporarily extend beyond the date of expiration unless the Commission complied with the company's demands, which were considered to be excessive, it was, therefore, necessary to rush the construction work to completion, with a resulting increase in expenditure over the estimated cost of completing this work under normal conditions. The load on the district will be supplied from this new development early during the coming year. In addition to supplying the present requirements of the City of Port Arthur, this plant is being constructed with sufficient capacity to take care of the future requirements of Port Arthur and Fort William, and, also, the requirements of large industries, which are being established in this district, a number of which are now under construction.

MUSKOKA SYSTEM

The year's operation of this system, which comprises the Municipalities of Huntsville and Gravenhurst, indicates a steady demand for power to the full capacity of the generating station, although the industrial conditions, at the close of the year, resulted in a slight falling off of the load in Huntsville. Investigations were made during the year covering an extension to the generating station at South Falls to provide for increased capacity, as the load in both municipalities served was such that the existing equipment was insufficient to supply the complete power requirements. The extension was not proceeded with, however, as later in the year the demand at Huntsville dropped to such an extent as to enable existing equipment to take care of the load. It is expected, however, that as soon as conditions again become normal, arrangements will be made to take care of this extension to the generating plant to provide for increased demands, of which there is every evidence at both Huntsville and Gravenhurst, and quite probably at Bracebridge.

ST. LAWRENCE SYSTEM

Up to the middle of the year 1919, the St. Lawrence System was supplied with power from a small hydraulic plant at Iroquois.

From the 1st of May, 1919, power was supplied through a large sub-station, erected at Cornwall, at which point power was received from the Cedars Rapids Power & Transmission Company. This station was designed to carry a considerably larger load than that required by the municipalities receiving service at that time, and, throughout the year, efforts have been made to extend the system and increase the load. Arrangements have been made to supply power to five new municipalities located north and east of Cornwall, and the lines and stations to serve these municipalities are now being constructed. When these municipalities are connected, the only municipality in the district not being supplied with Hydro-Electric power will be the Town of Cornwall, near which the Commission's High Tension Station is located.

During the year applications for power were received from a number of industries, estimates being requested of the cost of supplying large blocks of power for these industries, at various points on the system.

It is expected that the growth of the load during the coming year will require an extension to be made to the Cornwall Station, to take care of the increased power demands. Already two customers have stated their willingness to sign contracts for large blocks of power, which will place this system on a good financial basis during the coming year.

RIDEAU SYSTEM

During the first half of the year, power was supplied from the Rideau Power Company, at Merrickville, to Smith's Falls and Perth, the Carleton Place Plant being operated to supply the Municipality of Carleton Place.

During part of the year the Municipalities of Smith's Falls and Perth were greatly handicapped on account of shortage of water on the Rideau Canal, due to lack of conservation of the water supply by the canal authorities, and a number of delegations appealed to the Department of Railways and Canals, at Ottawa, to have the water supply properly regulated, in order that the municipalities depending on the power supply obtained from the waters of the Rideau Canal System might not be jeopardized. This lack of sufficient water power necessitated the operation of the Smith's Falls steam plant, with the large consequent increase in operating expenses.

The demands for power on this system have been rapidly increasing since power was first supplied from the plant of the Rideau Power Company, at Merrickville, and, while this plant had sufficient capacity to supply the requirements of the municipalities during the first two years' operation, the growth of the industries in Smith's Falls, Perth and Carleton Place has been so rapid as to require a large additional supply of power, and it was, therefore, necessary, in the face of adverse labour conditions, for the Commission to proceed with the construction of a plant at High Falls, in order to obtain sufficient power to meet the requirements of these municipalities. During the period of the construction of this plant, labour conditions were exceedingly bad, and from the time the work started until its completion, the cost of labour and material had increased by over 100 per cent., with a consequent increase in the capital cost of the plant over the original estimates, which were based on the condition of material and labour existing at the time the construction work was started. On May 1st this plant was put into service, and since that time the power loads of the various municipalities on the system have rapidly increased, and it is expected that during the coming year, with a plentiful supply of power on this system, there will be a marked improvement in the financial condition of the system.

CENTRAL ONTARIO SYSTEM

The financial results of the operation of this system during the fiscal year have been satisfactory. The demand for power increased to such an extent that the Commission decided that additional generating capacity would be required, and authority was therefore obtained for the construction of a new generating station at Ranney's Falls, near Campbellford. The completion of this station will add 10,000 horse power to the capacity of the system. Work on its construction is progressing

favourably, and it is expected that it will be placed in regular service in September, 1921.

Contracts have been entered into between the Commission and a number of municipalities which had not been served previously, and all these new municipalities will receive service early in 1921.

During the month of September and the first half of October the operation of the system was seriously handicapped by low water in the Trent River. The control of the storage reservoirs on the river is not vested in the Commission, and the curtailment of service resulting from the methods employed by those in control was beyond the power of the Commission to prevent. A serious shortage of power for a period of six weeks resulted in great loss to manufacturers in all the municipalities served.

The Campbellford Pulp Mill had a most successful year, owing to the strong demand for groundwood and the high market price.

Respectfully submitted,

ADAM BECK,

Chairman.

TORONTO, ONT., March 30th, 1921.

COLONEL SIR ADAM BECK, Kt., LL.D.,

*Chairman, Hydro-Electric Power Commission of Ontario,
Toronto, Ont.*

SIR,—I have the honour to transmit herewith the Thirteenth Annual Report of the Hydro-Electric Power Commission of Ontario for the fiscal year ending October 31st, 1920.

I have the honour to be,

Sir,

Your obedient servant,

W. W. POPE,

Secretary.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

COLONEL SIR ADAM BECK, Kt., LL.D., Chairman.

HONOURABLE I. B. LUCAS, K.C.

LT. COL. HON. D. CARMICHAEL, D.S.O., M.C.

W. W. POPE, Secretary.

F. A. GABY, Chief Engineer.

THIRTEENTH ANNUAL REPORT
OF THE
Hydro-Electric Power Commission
of Ontario

SECTION I
LEGAL PROCEEDINGS

ACTS

An Act to amend The Water Powers Regulation Act

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as *The Water Powers Regulation Act, 1920*. Short title.

2. *The Water Powers Regulation Act*, as amended by *The Water Powers Regulation Act, 1917*, and section 57 of *The Statute Law Amendment Act, 1918*, is further amended by adding thereto the following section:—

14. Where the owner is developing electrical power or energy by the diversion of the waters of the Niagara River under any contract, agreement, license, lease or other instrument entered into by the owner or his predecessors in title with or granted to the owner or his predecessors in title by the Commissioners of the Queen Victoria Niagara Falls Park, and the owner diverts or uses more water than he is entitled to divert or use or develops or generates a greater amount of electrical energy than he is entitled to develop or generate under the contract, agreement, license, lease or other instrument, the inspector may with the authority of the Lieutenant-Governor in Council give to the said owner notice in writing to cease diverting or using more water than he is entitled to divert or use or generating or developing a greater amount of electrical power or energy than he is entitled to develop or generate, and if the owner, after the expiration of one month from the giving of said notice, diverts or uses more water than he is entitled to divert or use or develops or generates a greater amount of electrical power or energy than he is entitled to develop or generate, then every franchise or right of occupancy or possession or right to develop or use any of the waters of the Niagara River
- Owner diverting more water than he is entitled to divert or developing more power than he is entitled to develop in Niagara Falls Park.
- Forfeiture of rights in park.

or to operate or construct any works which may be enjoyed by the owner therefor, and notwithstanding anything contained in any such contract, agreement, license, lease or other instrument or in any by-law or in any general or special Act of this Legislature shall cease and be at an end.

Rescission
of order
for delivery
of excess de-
velopment.

15. The Lieutenant-Governor in Council may, at any time, rescind any order made by him under subsection 2 of section 13 of this Act, and thereupon all right of the owner to develop power or use water or develop or generate power in excess of the owner's rights as found by the said commissioners shall cease, but any such rescission shall not relieve the owner from any penalties incurred by him under subsection 3 of section 13 of this Act prior to the date of such rescission.

An Act to amend The Hydro-Electric Railway Act

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Short
title.

1. This Act may be cited as *The Hydro-Electric Railway Act, 1920*.

6 Geo. V,
c. 37, s. 2,
amended.

Submission
of by-law.

2. Subsection 5 of section 4 of *The Hydro-Electric Railway Act, 1914*, as enacted by section 2 of *The Hydro-Electric Railway Act, 1916*, is amended by striking out the word "may" in the third line thereof and substituting therefor the word "shall," and by striking out the words "majority of such electors" in the seventh line and substituting therefor the words "majority of the electors voting thereon," and by striking out the words "until at least three months have expired since the date of the sanctioning of the agreement by the Lieutenant-Governor in Council nor" in the clause lettered *a* to the said subsection 5, and the amendments hereby made shall have effect as to any agreement which has heretofore received the sanction of the Lieutenant-Governor in Council, as provided by subsection 4 of the said section.

6 Geo. V,
c. 37, s. 3,
amended.

3. Subsection 6 of section 4 of *The Hydro-Electric Railway Act, 1914*, as amended by section 3 of *The Hydro-Electric Railway Act, 1916*, is repealed and the following substituted therefor:—

Purchasing,
etc., of
railway.

- (6) The agreement may include in its terms the acquiring by purchase or lease of any steam railway, electric railway or street railway or any part or parts thereof or the obtaining of running rights over the same.

4 Geo. V,
c. 31, s. 7,
amended.
Liability
of Province
on bonds.

4. Section 7 of *The Hydro-Electric Railway Act, 1914*, is amended by striking out all the words in the first three lines and substituting therefor the following words: "The Province of Ontario shall not be liable in any manner for the payment of any bonds except to the extent

of any guarantee given under the provisions of section 8, nor shall the Commission be liable in any manner for the payment of such bonds except to the extent of."

5. It is declared that all bonds heretofore or hereafter issued by the Hydro-Electric Power Commission of Ontario for the construction and equipment of a railway or any section of a railway under *The Hydro-Electric Railways Act, 1914*, or under this Act shall constitute a first mortgage charge upon the railway or section of a railway and the holder of any such bonds upon default of payment thereof, in addition to any other remedy or recourse shall on behalf of himself and all other bondholders have the same rights and remedies as a mortgagee of the said railway or section.

6.—(1) Where an agreement has been entered into by the Hydro-Electric Power Commission of Ontario for the construction, equipment, maintenance and operation of a railway under the provisions of *The Hydro-Electric Railway Act, 1914*, and amendments thereto, and notwithstanding that such agreement has not been approved of by the electors of one or more of the municipal corporations named as parties thereto, or has not been executed by any such municipal corporation, the Commission may construct, complete, equip, maintain and operate any section of the railway and may issue the bonds of the Commission for the construction or equipment of such section.

(2) The bonds so issued shall be a charge upon the section of the railway and all the assets, rights, privileges, revenue, works, property and effects belonging thereto or held or used in connection therewith.

(3) *The Hydro-Electric Railway Act, 1914*, and amendments thereto shall apply as if such bonds were issued for the construction of a railway under an agreement entered into in accordance with the provisions of the said Act, and such bonds may be guaranteed in the manner provided by section 8 of the said Act.

(4) The Commission shall not proceed with the construction or equipment of any such section until—

(a) The Lieutenant-Governor in Council has authorized the construction, equipment and operation of such section; and

(b) The council of every municipality in or through which such section or any portion thereof is to be constructed has executed the agreement for the construction of the railway, or if the corporation of any municipality in or through which such section or any portion thereof is to be constructed has not approved and executed such agreement, the councils of the remaining municipalities have by resolution as provided by subsection 1 of section 9 of *The Hydro-Electric Railway Act, 1919*, expressed the desire to proceed with the undertaking and have deposited with the Commission additional

debentures on the amount required to replace the debentures which would have been deposited by the municipal corporation or municipal corporations failing to execute the agreement.

Deposit of
municipal
debentures.

(5) The corporation of every municipality through or in which any such section, or any portion thereof, is to be constructed shall deposit with the Commission debentures to the amount set out in the schedule to the agreement for the construction of the railway, together with such additional amount as such corporation may undertake to contribute under section 9 of *The Hydro-Electric Railway Act, 1919*, or to such lesser amount as may be necessary to cover the cost of constructing and equipping the section and to provide for the payment of the bonds of the Commission issued therefor.

Debentures
to be dealt
with under
4 Geo. V,
c. 31, s. 11.

(6) The debentures deposited by the municipal corporation for the construction of any such section may be dealt with in all respects in the manner provided by section 11 of *The Hydro-Electric Railway Act, 1914*,

Section to
be deemed
a railway.

(7) Every such section shall be deemed to be a railway constructed and approved under *The Hydro-Electric Railway Act, 1914*, and the amendments thereto.

Rights and
obligations
not affected.

(8) Except so far as otherwise expressly provided by this section, the construction, equipment, and operation of any such section of the railway, shall not affect or increase or diminish any rights or obligations of the Commission or of any municipal corporation under any agreement theretofore or thereafter executed for the construction of a railway which includes such section, or of any other section thereof, and no municipal corporation shall be liable to contribute to the cost of the railway or to any section thereof beyond the amount limited by the agreement executed by it, except for any additional amount which such corporation may have undertaken to contribute under section 9 of *The Hydro-Electric Railway Act, 1919*, upon the failure of any other municipal corporation named as a party to the agreement to approve or execute the same.

Section
retroactive
to 1st July,
1919.

(9) This section shall take effect as from the first day of July, 1919.

By-laws
confirmed.

7.—(1) The by-laws, the forms of which are respectively set out in schedule "A" and schedule "B" to this Act, and which have been heretofore respectively submitted to the vote of the municipal electors of the municipalities named in the schedules to the said by-laws are declared to have been so submitted in due compliance with the provisions of *The Hydro-Electric Railway Act, 1914*, and when finally passed by the council of any of the municipalities named in the contracts appended to each of the said by-laws shall be legal, valid and binding upon the corporation and the ratepayers thereof, anything in any general or special Act of this Legislature to the contrary notwithstanding.

(2) It shall be the duty of the council of every municipality in which either of such by-laws have been approved or shall hereafter be approved by the electors, to finally pass the by-law and give effect to the same. Council to pass by-laws.

8.—(1) The contracts set out in schedule "A" and schedule "B" to this Act and purporting to be made respectively between the Hydro-Electric Power Commission of Ontario of the first part, and certain municipal corporations shall be deemed to have been made in pursuance of *The Hydro-Electric Railway Act, 1914*, and to comply with the provisions thereof, and the said contracts shall respectively be legal, valid and binding upon the Commission and upon every municipal corporation a party thereto and executing the same, anything in the said Act or in any other general or special Act of this Legislature to the contrary notwithstanding. Contracts confirmed.

(2) It shall be the duty of the head and the clerk or treasurer of each of the said municipal corporations party to either of the said contracts to sign the contracts and affix the seal of the corporation thereto forthwith after the passing of the by-law approving of the same, whether the same shall have been so submitted before or after the passing of this Act. Duty of head and clerk or treasurer as to signing by-law.

9. The contract set out in schedule "C" to this Act, and purporting to be made between the Detroit United Railway, the Hydro-Electric Power Commission of Ontario, the Sandwich, Windsor and Amherstburg Railway and the Windsor and Tecumseh Electric Railway Company shall be deemed to have been made in pursuance of *The Hydro-Electric Railway Act, 1914*, and to comply with the provisions thereof, and the said contract shall be legal, valid and binding upon the parties thereto, anything in the said Act or in any other general or special Act of this Legislature to the contrary notwithstanding. Contract confirmed.

10. This Act shall come into force and take effect on the day on which it receives the Royal Assent. Commencement of Act.

AGREEMENTS

SCHEDULE "A."

TORONTO AND EASTERN DIVISION.

By-laws to be Ratified by Legislation.

TOWNSHIPS.	DATE PASSED.	BY-LAW No.
York.....	February 16th, 1920.....	4892
Scarboro.....	December 15th, 1919.....	1000
Pickering.....	November 21st, 1919.....	1123
Whitby.....	December 1st, 1919.....	1026
Whitby East.....	December 15th, 1919.....	857
Darlington.....	December 29th, 1919.....	780
TOWNS.		
Whitby.....	December 1st, 1919.....	1035
Oshawa.....	December 22nd, 1919.....	1452
Bowmanville.....	December 9th, 1919.....	987
CITIES.		
Toronto.....	January 29th, 1920.....	8299

MUNICIPALITY OF THE

of

BY-LAW No. —.

A by-law to authorize a certain agreement made between The Hydro-Electric Power Commission of Ontario and the municipal corporation of the _____ of _____ and other municipal corporations for the construction, equipment and operation of an electric railway under *The Hydro-Electric Railway Act, 1914*, and amendments thereto.

Whereas it is expedient that the corporation of the _____ of _____ and other municipal corporations should enter into an agreement under *The Hydro-Electric Railway Act, 1914*, and amendments thereto, with the Hydro-Electric Power Commission of Ontario, hereinafter called the Commission for the construction, equipment and operation of an electric railway in and through the municipality of the _____ of _____, and certain other municipalities upon the terms and conditions and subject to the provisions set forth and contained in the agreement set out in this by-law, and according to the routes set forth in schedule "A" to the said agreement;

And whereas the estimated cost of the work under the said agreement is \$8,360,794.00 and whereas the portion of the cost of the construction and equipment of the line to be borne by the corporation of the municipality of the _____ of _____, is estimated at \$ _____, as set out in schedule "B" to the said agreement, subject to adjustments and apportionment between the corporations by the Commission from time to time, as provided by the said agreement;

And whereas the total amount estimated to be required for the main-tenance of the railway, apart from operating expenses, is \$186,588 (the operating revenue being estimated at \$1,118,003, and operation and main-tenance at \$658,135);

And whereas the total annual amount estimated to be required for the period of ten years immediately following the date of the issue of the bonds to be issued under the said agreement, for interest on the said bonds is \$418,040 and thereafter, for the next ensuing forty years, the annual amount estimated to be required for sinking fund charges for the retirement of the said bonds is \$83,608 and for interest on the said bonds \$418,040;

And whereas the portion to be borne by the municipality of the _____ of _____, of the said annual amounts estimated to be required for maintenance, sinking fund charges and interest is estimated at \$ _____ for the first ten years, as aforesaid, and thereafter at \$ _____ on the same basis as the portion of the cost of construction and equipment, as aforesaid, subject to adjustments and apportionment between the corporations by the Commission from time to time as provided by the said agreement;

And whereas the amount of the whole rateable property of the corporation according to the last revised assessment roll is \$ _____, and the amount of the debenture debt of the corporation is \$ _____, of which neither principal nor interest is in arrear;

And whereas only a portion of the municipality of the _____ of _____ as enumerated in schedule "C" to the said agreement, is served by said railway;

Therefore the municipal council of the corporation of the _____ of _____ enacts as follows:—

1. It shall be lawful for the corporation of the _____ of _____, and the said corporation is hereby authorized to enter into the following agreement with the Hydro-Electric Power Commission of Ontario and other corporations, the said agreement being hereby incorporated into and forming a part of this by-law, and the _____ and clerk of the corporation are hereby authorized and directed to execute the said agreement upon behalf of this corporation and to attach the seal of the corporation thereto.

2. Only those duly qualified property owners in the _____ of _____, in the district enumerated in schedule "C" of said agreement shall be entitled to vote on the by-law, and any rate required to be levied for payment of debentures or interest thereon shall be raised, levied and collected from the rateable property in such district only.

This indenture made the _____ day of _____ in the year of our Lord, one thousand nine hundred and _____

Between

The Hydro-Electric Power Commission of Ontario (hereinafter called the "Commission") of the first part,

and

The Municipal Corporations of the Township of York, the Township of Scarboro, the Township of Pickering, the Township of Whitby, the Township of East Whitby, the Township of Darlington, the Town of Whitby, the Town of Oshawa, the Town of Bowmanville and the City of Toronto (hereinafter called the "Corporations") of the second part.

Whereas pursuant to *The Hydro-Electric Railway Act, 1914*, and amendments thereto the Commission was requested to enquire into, examine,

investigate and report upon the cost of construction and operation of an electric railway or railways to be constructed through certain districts in which the corporations are situated, together with the probable revenue that would result from the operation of such railway or railways;

And whereas the Commission has furnished the corporations with such a report showing (1) the total estimated cost, operating revenue and expenses of the railway or railways, and (2) the proportion of the capital cost to be borne by each of the corporations as set forth in schedule "B" attached hereto;

And whereas on receipt of the said report the corporation requested the Commission to construct, equip and operate a system of electric railways (hereafter called the railway) over the routes laid down in schedule "A" attached hereto, upon the terms and conditions and in the manner herein set forth;

And whereas, the Commission has agreed with the corporations on behalf of the corporations to construct, equip and operate the railway upon the terms and conditions, and in the manner herein set forth, but upon the expressed conditions that the Commission shall not in any way be liable by reason of any error or omission in any estimates, plans or specifications for any financial or other obligation or loss whatsoever by virtue of this agreement or arising out of the performance of the terms thereof;

And whereas the electors of each of the corporations have assented to by-laws authorizing the corporations to enter into this agreement with the Commission for the construction, equipment and operation of the railway as laid down in the said schedules, subject to the following terms and conditions;

And whereas the corporations have each issued debentures for the amounts set forth in schedule "B" attached hereto and have deposited the said debentures with the Commission;

Now, therefore, this indenture witnesseth:—

1. In consideration of the premises and of the agreements of the corporations herein contained, and subject to the provisions of the said Act and amendments thereto, the Commission agrees with the corporations respectively:

(a) To construct, equip and operate the railway through the districts in which the corporations are situate on behalf of the corporations;

(b) To construct and operate the railway over the routes laid down in schedule "A";

(c) To issue bonds, as provided in paragraph 3 of this agreement, to cover the cost of constructing and equipping the railway;

(d) To furnish as far as possible first-class modern and standard equipment for use on the railway, to operate this equipment so as to give the best service and accommodation possible, having regard to the district served, the type of construction and equipment adopted and all other equitable conditions, and to express all due skill and diligence so as to secure the most effective operation and service of the railway consistent with good management;

(e) To regulate and fix the fares and rates of toll to be collected by the railway for all classes of service;

(f) To utilize the routes and property of the railway for all purposes from which it is possible to obtain a profit;

(g) To combine the property and works of the railway and the power lines of the Commission where such combination is feasible and may prove economical to both the railway and the users of the power lines;

(h) To permit and obtain interchange of traffic with other railways wherever possible and profitable;

(i) To supply electrical power or energy for operation of the railway at rates consistent with those charged to municipal corporations;

(j) To apportion annually the capital costs and operating expenses of all works, apparatus and plant used by the railway in common with the Commission's transmission lines in a fair manner, having regard to the service furnished by the expenditure under consideration;

(k) To apply the revenue derived from operation of the railway and any other revenue derived from the undertaking to the payment of operating expenses (including electrical power), the cost of administration, and annual charges for interest and sinking fund on the money invested, and such other deductions as are herein provided for;

(l) To set aside from any revenue thereafter remaining an annual sum for the renewal of any works belonging in whole or in part to the undertaking;

(m) To pay over annually to the corporations, if deemed advisable by the Commission in the interests of the undertaking, any surplus that may remain after providing for the items above mentioned. The division of such surplus between the corporations to be fixed by the Commission on an equitable basis, having regard in the case of each corporation to the capital invested, the service rendered, the comparative benefits derived, and all other like conditions;

(n) To take active steps for the purpose of constructing, equipping and operating the railway at the earliest possible date after the execution of this agreement by the corporations and the deposit of the debentures as called for under clause 2b hereof and to commence operation of each section as soon as possible after its completion;

(o) To make such extensions to the railway described in schedule "A" as may appear advantageous and profitable from time to time.

Provided always that as part of any line of railway to be constructed and operated by the Commission, the Commission may purchase, lease or obtain running rights over any steam railway, electrical railway or street railway or any part thereof.

2. In consideration of the premises and of the agreements herein set forth, each of the corporations for itself, and not one for the other, agrees with the Commission:

(a) To bear its share of the cost of constructing, equipping, operating, maintaining, repairing, renewing and insuring the railway and its property and works as established by the Commission, subject to adjustments and apportionment between the corporations by the Commission from time to time;

(b) To issue debentures for the amounts set forth in schedule "B" maturing in fifty years from the date of issue thereof, and bearing interest at a rate of not less than _____ per centum per annum, payable half-yearly at the _____ Bank, at Toronto, Ontario. Such debentures shall be deposited with the Commission previous to the issuing of the bonds mentioned above, and may be held or disposed of from time to time by the Commission, as provided for in clause 4 hereof, in such amounts, at such rates of discount or premium, and on such terms and conditions as the Commission in its sole discretion shall deem to be in the interest of the railway, the proceeds of such debentures being used solely for the purposes herein contained. The amount of debentures of each corporation sold or disposed of from time to time shall be of such proportion as may be fixed by the Commission of the total amount of debentures, due regard being given to the capital invested, the service rendered, the comparative revenue derived, and all other equitable conditions;

(c) To make no agreement or arrangement with, and to grant no bonus, license or other inducement to any other railway or transportation company without the written consent of the Commission;

(d) To keep, observe, and perform the covenants, provisoes and conditions set forth in this agreement intended to be kept and observed and performed by the corporations, and to execute such further or other documents and to pass such by-laws as may be requested by the Commission for the purpose of fully effectuating the objects and intent of this agreement;

(e) To furnish a free right of way for the railway and for the power lines of the Commission over any property of the corporation upon being so requested by the Commission, and to execute such conveyance thereof or agreement with regard thereto as may be desired by the Commission.

3. It shall be lawful, and the Commission is hereby authorized to create or cause to be created, an issue of bonds, and to sell or dispose of the same on behalf of the corporations. Such bonds to be charged upon and secured by the railway, and all the assets, rights, privileges, revenues, works, property and effects belonging thereto or held or used in connection with the railway constructed, acquired, operated and maintained by the Commission under this agreement, and to be for the total amounts mentioned in schedule "B" hereto attached; provided that the Commission may, upon obtaining the consent as herein defined of the majority of the corporations, increase the said bond issue by any amount necessary to cover the capital cost of extending the railway, and may also without such consent increase the said bond issue to cover the cost of additional works or equipment of any kind, for use on the railway, to an extent not exceeding ten per cent. (10%) of the bonds issued from time to time. In order to meet and pay such bonds and interests as the same becomes due and payable, the Commission shall in each year after the expiration of ten years from the date of the issue of the bonds, out of the revenue of the railway, after payments of operating expenses (including electrical power) and the cost of administration set aside a sufficient sum to provide a sinking fund for the purpose of redeeming the same at maturity. Debentures issued by the corporations, in compliance with clause 2b hereof, shall, to the extent of the par value of any bonds outstanding from time to time, be held or disposed of by the Commission in trust for the holders of such bonds as collateral security for payment thereof, it being understood and agreed that, in the event of any increase of the said bond issue, each corporation shall, upon the request of the Commission, deposit with the Commission, additional debentures, as

described in clause 2b hereof, to be held or disposed of by the Commission as collateral security for such increase of the said bond issue, and that any debentures held by the Commission in excess of the par value of the outstanding bonds from time to time may be held or disposed of by the Commission to secure payment of any deficit arising from the operation of the railway.

4. In the event of the revenue derived from the operation of the undertaking being insufficient in any year to meet the operating expenses (including electrical power), the cost of administration and the annual charges for interest and sinking fund on the bonds, and for the renewal of any works belonging in whole or in part to the railway, such deficit shall be paid to the Commission by the corporations upon demand of and in the proportion adjusted by the Commission. In the event of the failure of any corporation to pay its share of such a deficit as adjusted by the Commission, it shall be lawful for the Commission, in the manner provided in clause 2b to dispose of debentures held by the Commission as security for any such deficit. Any arrears by any corporation shall bear interest at the legal rate.

5. Should any corporation fail to perform any of the obligations to the Commission under this agreement, the Commission may, in addition to all other remedies and without notice, discontinue the service of the railway to such corporation in default until the said obligation has been fulfilled, and no such discontinuance of service shall relieve the corporation in default from the performance of the covenants, provisoes and conditions herein contained.

6. In case the Commission shall at any time or times be prevented from operating the railway or any part thereof by strike, lockout, riot, fire, invasion, explosion, act of God, or the King's enemies, or any other cause reasonably beyond its control, then the Commission shall not be bound to operate the railway or such part thereof during such time; but the corporations shall not be relieved from any liability or payment under this agreement, and as soon as the cause of such interruption is removed the Commission shall, without any delay, continue full operation of the railway, and each of the corporations shall be prompt and diligent in doing everything in its power to remove and overcome any such cause or causes of interruption.

7. It shall be lawful for, and the corporations hereby authorize the Commission, to unite the business of the railway with that of any other railway system operated in whole or in part by the Commission, and to exchange equipment and operators from one system to the other, proper provision being made so that each system shall pay its proportionate share of the cost of any equipment used in common.

8. If at any time any other municipal corporation applies to the Commission for an extension of the railway into its municipality, the Commission shall notify the applicant and the corporations, in writing, of a time and place to hear all representations that may be made as to the terms and conditions relating to such proposed extension. If, on the recommendation of the Commission, such extension shall be authorized, without discrimination in favor of the applicant, as to the cost incurred or to be incurred for or by reason of any such extension, the Commission may extend the railway upon such terms and conditions as may appear equitable to the Commission.

No such application for an extension of the railway into any municipality the corporation of which is not a party to this agreement shall be

granted if it is estimated by the Commission that the cost of service of the railways to the corporations parties hereto will be thereby increased or the revenue and accommodation be injuriously affected, without the written consent of the majority of the corporations parties hereto.

9. The consent of any corporation required under this agreement shall mean the consent of the council of such corporations, such consent being in the form of a municipal by-law duly passed by the council of the corporation.

10. The Commission shall, at least annually, adjust and apportion between the corporations the cost of construction, equipment, operation, interest, sinking fund, and also the cost of renewing the property of the railway.

11. Every railway and all the works, property and effects held and used in connection therewith, constructed, acquired, operated and maintained by the Commission under this agreement and the said Act shall be vested in the Commission on behalf of the corporations; but the Commission shall be entitled to a lien upon the same for the money expended by the Commission under this agreement and not repaid.

12. Each of the corporations covenants and agrees with the other:

(a) To carry out the agreements and provisions herein contained;

(b) To co-operate by all means in its power at all times with the Commission to create the most favorable conditions for the carrying out of the objects of the agreement and of the said Act, and to increase the revenue of the railway and ensure its success.

13. In the event of any difference between the corporations the Commission may, upon application, fix a time and place to hear all representations that may be made by the parties, and the Commission shall adjust such differences, and such adjustments shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act Respecting Enquiries Concerning Public Matters*.

14. This agreement shall continue and extend for a period of fifty years from the date hereof, and at the expiration thereof be subject to renewal, with the consent of the corporations from time to time for like periods of fifty years, subject to adjustment and re-apportionment as herein provided for the purposes of this agreement as though the terms hereof had not expired. At the expiration of this agreement the Commission shall determine and adjust the rights of the corporations, having regard to the amounts paid or assumed by them respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

15. It is understood and agreed that the rates imposed for the share of the cost to be borne by those municipalities listed in schedule "C" attached hereto, shall be imposed upon the rateable property set forth respectively in the said schedule.

16. This agreement shall not come into effect until it has been sanctioned by the Lieutenant-Governor in Council.

In witness whereof the Commission and the corporations have respectively affixed their corporate seals and the hands of their proper officers.

SCHEDULE "A."

ROUTE.

Toronto-Pickering Section.

Commencing at the proposed terminal in the City of Toronto, the line extends easterly over the property of the Toronto Harbour Commission, thence northerly to the C.N.R., thence easterly to a point near where the C.N.R. crosses St. Clair Avenue, thence extending easterly in a general direction parallel to the G.T.R., crossing Kingston Road at a point near where the latter is intersected by that railway, thence easterly roughly paralleling the Kingston Road, to Pickering.

Pickering-Bowmanville Section.

The line follows the right of way of the present Toronto Eastern Railway through Concession II of the Townships of Pickering, Whitby and Whitby East, passing through the towns of Whitby and Oshawa, thence through Concession II of the Township of Darlington, to Bowmanville.

SCHEDULE "B."

Name of Municipal Corporation.	Total amount of debentures to be issued by the respective municipalities and deposited with the Commission under Clause 2b.
Township of York	\$381,587
Township of Scarboro	892,686
Township of Pickering	482,050
Township of Whitby	280,304
Township of East Whitby	299,943
Township of Darlington	429,680
Town of Whitby	277,955
Town of Oshawa	771,894
Town of Bowmanville	216,030
City of Toronto	4,328,665
Total amount of bonds to be issued mentioned in Clause 3	
	\$8,360,794

SCHEDULE "B."

ESSEX COUNTY DIVISION.

By-laws to be Ratified by Legislation.

TOWNSHIPS.	DATE PASSED.	BY-LAW No.
Sandwich, West.....	December 22nd, 1919.....	561
Sandwich, East.....	December 23rd, 1919.....	823
TOWNS.		
Amherstburg.....	December 23rd, 1919.....	250 B
Ford City	December 23rd, 1919.....	175
Ojibway.....	December 23rd, 1919.....	67
Sandwich.....	December 23rd, 1919.....	831
Walkerville.....	December 23rd, 1919.....	766
CITIES.		
Windsor.....	December 23rd, 1919.....	2467

MUNICIPALITY OF THE

of

BY-LAW No. —.

A by-law to authorize a certain agreement made between The Hydro-Electric Power Commission of Ontario and the municipal corporation of the of and other municipal corporations, for the construction, acquisition, equipment and operation of an electric railway under *The Hydro-Electric Railway Act, 1914, and amendments thereto*.

Whereas it is expedient that the corporation of the of and other municipal corporations should enter into an agreement under the *The Hydro-Electric Railway Act, 1914, and amendments thereto*, with the Hydro-Electric Power Commission of Ontario, hereinafter called the Commission, for the construction, acquisition, equipment and operation of an electric railway in and through the municipality of the of and certain other municipalities, upon the terms and conditions and subject to the provisions set forth and contained in the agreement set out in this by-law, and according to the routes set forth in schedule "A" to the said agreement;

And whereas the estimated cost of the work under the said agreement is \$2,100,000.00, and whereas the portion of the cost of the construction, acquisition and equipment of the line to be borne by the corporation of the municipality of is estimated at as set out in schedule "B" to the said agreement, subject to adjustments and apportionment between the corporations by the Commission from time to time, as provided by the said agreement;

And whereas the total amount estimated to be required for the maintenance of the railway, apart from operating expenses, is \$134,000.00 (the operating revenue being estimated at \$491,000.00) and operation and maintenance at \$339,000.00;

And whereas the total annual amount estimated to be required for the period of ten years immediately following the date of issue of the bonds to be issued under the said agreement for interest on the said bonds is \$95,755.00 and for sinking fund charges is \$18,490.00, and for the period of thirty years following the said ten years period for interest is \$95,755.00 and for sinking fund is \$21,000.00, and for the period of ten years following the said thirty year period for interest is \$12,550.00 and for sinking fund is \$2,510.00;

And whereas the portion to be borne by the municipality of the of of the said annual amounts estimated to be required for maintenance, sinking fund, charges and interest is estimated at for the first ten years, as aforesaid, and for the next following thirty years at and thereafter at on the same basis as the portion of the cost of construction and equipment as aforesaid subject to adjustments and apportionment between the corporations by the Commission from time to time as provided by the said agreement;

And whereas the amount of the whole rateable property of the corporation according to the last revised assessment roll is and the amount of the debenture debt of the corporation is of which neither principal nor interest is in arrear;

Therefore, the municipal council of the corporation of the
of enacts as follows:—

1. It shall be lawful for the corporation of the
of _____ and the said corporation is hereby authorized to
enter into the following agreement with the Hydro-Electric Power Commis-
sion of Ontario and other corporations, the said agreement being hereby in-
corporated into and forming a part of this by-law, and the
and clerk of the corporation are hereby authorized and directed to execute
the said agreement upon behalf of this corporation and to attach the seal of
the corporation thereto.

This indenture made the first day of January in the year of our Lord, one thousand nine hundred and twenty.

Between

The Hydro-Electric Power Commission of Ontario (hereinafter called the "Commission") of the first part;

and

The Municipal Corporations of the Township of Sandwich East, the Township of Sandwich West, the Township of Anderdon, the Town of Ford City, the Town of Walkerville, the Town of Sandwich, the Town of Ojibway, the Town of Amherstburg, and the City of Windsor (hereinafter called the "Corporations") of the second part.

Whereas pursuant to *The Hydro-Electric Railway Act, 1914*, and amendments thereto the Commission was requested to enquire into, examine, investigate and report upon the cost of construction and operation of an electric railway or railways to be constructed through certain districts in which the corporations are situated, together with the probable revenue that would result from the operation of such railway or railways;

And whereas the Commission has furnished the corporations with such a report showing (1) the total estimated cost, operating revenue and expenses of the railway or railways, and (2) the proportion of the capital cost to be borne by each of the corporations as set forth in schedule "B" attached hereto;

And whereas on receipt of the said report the corporations requested the Commission to construct, equip and operate a system of electric railways (hereinafter called the railway) over the routes laid down in schedule "A" attached hereto, upon the terms and conditions and in the manner herein set forth;

And whereas the Commission has agreed with the corporations on behalf of the corporations to construct, equip and operate the railway upon the terms and conditions and in the manner herein set forth; but upon the express conditions that the Commission shall not in any way be liable by reason of any error or omission in any estimates, plans or specifications for any financial or other obligation or loss whatsoever by virtue of this agreement or arising out of the performance of the terms thereof;

And whereas the electors of each of the corporations have assented to by-laws authorizing the corporations to enter into this agreement with the

Commission for the construction, equipment and operation of the railway as laid down in the said schedules, subject to the following terms and conditions;

And whereas the corporations have each issued debentures for the amounts set forth in schedule "B" attached hereto, and have deposited the said debentures with the Commission;

Now, therefore, this indenture witnesseth:—

1. In consideration of the premises and of the agreements of the corporations herein contained, and subject to the provisions of the said Act and amendments thereto, the Commission agrees with the corporations respectively;

(a) To construct, equip and operate the railway through the districts in which the corporations are situate on behalf of the corporations;

(b) To construct and operate the railway over the routes laid down in schedule "A";

(c) To issue bonds, as provided in paragraph 3 of this agreement, to cover the cost of constructing and equipping the railway;

(d) To furnish as far as possible first-class modern and standard equipment for use on the railway, to operate this equipment so as to give the best service and accommodation possible, having regard to the district served, the type of construction and equipment adopted and all other equitable conditions, and to exercise all due skill and diligence so as to secure the most effective operation and service of the railway consistent with good management;

(e) To regulate and fix the fares and rates of toll to be collected by the railway for all classes of service;

(f) To utilize the routes and property of the railway for all purposes from which it is possible to obtain a profit;

(g) To combine the property and works of the railway and the power lines of the Commission where such combination is feasible and may prove economical to both the railway and the users of the power lines;

(h) To permit and obtain interchange of traffic with other railways wherever possible and profitable;

(i) To supply electrical power or energy for operation of the railway at rates consistent with those charged to municipal corporations;

(j) To apportion annually the capital costs and operating expenses of all works, apparatus and plant used by the railway in common with the Commission's transmission lines in a fair manner, having regard to the service furnished by the expenditure under consideration;

(k) To apply the revenue derived from operation of the railway and any other revenue derived from the undertaking to the payment of operating expenses (including electrical power), the cost of administration, and annual charges for interest and sinking fund on the money invested, and such other deductions as are herein provided for;

(l) To set aside from any revenue thereafter remaining an annual sum for the renewal of any works belonging in whole or in part to the undertaking;

(m) To pay over annually to the corporations, if deemed advisable by the Commission in the interest of the undertaking, any surplus that may remain after providing for the items above mentioned. The division of such surplus between the corporations to be fixed by the Commission on an equitable basis, having regard in the case of each corporation to the capital invested, the service rendered, the comparative benefits derived, and all other like conditions;

(n) To take active steps for the purpose of constructing, equipping and operating the railway at the earliest possible date after the execution of this agreement by the corporations and the deposit of the debentures as called for under clause 2b hereof and to commence operation of each section as soon as possible after its completion;

(o) To make such extensions to the railway described in schedule "A" as may appear advantageous and profitable from time to time.

Provided always that as part of any line of railway to be constructed and operated by the Commission, the Commission may purchase, lease or obtain running rights over any steam railway, electrical railway or street railway or any part thereof and that wherever the words "construction," "constructed," "construct" or "constructing" occur in this agreement they shall be interpreted as including "acquisition," "acquired," "acquire" or "acquiring."

2. In consideration of the premises and of the agreements herein set forth, each of the corporations for itself, and not one for the other, agrees with the Commission:

(a) To bear its share of the cost of constructing, equipping, operating, maintaining, repairing, renewing and insuring the railway and its property and works as established by the Commission, subject to adjustments and apportionment between the corporations by the Commission from time to time;

(b) To issue debentures for the amounts set forth in schedule "B" maturing in fifty years from the date of issue thereof, and bearing interest at a rate of not less than _____ per centum per annum, payable half-yearly at the _____ Bank, at Toronto, Ontario. Such debentures shall be deposited with the Commission previous to the issuing of the bonds mentioned above, and may be held or disposed of from time to time by the Commission as provided for in clause 4 hereof, in such amounts, at such rates of discount or premium, and on such terms and conditions as the Commission in its sole discretion shall deem to be in the interest of the railway, the proceeds of such debentures being used solely for the purposes herein contained. The amount of debentures of each corporation sold or disposed of from time to time shall be such proportion as may be fixed by the Commission of the total amount of debentures, due regard being given to the capital invested, the service rendered, the comparative revenue derived and all other equitable conditions;

(c) To make no agreement or arrangement with, and to grant no bonus, license or other inducement to any other railway or transportation company without the written consent of the Commission;

(d) To keep, observe and perform the covenants, provisoes and conditions set forth in this agreement intended to be kept and observed and performed by the corporations, and to execute such further or other documents and to pass such by-laws as may be requested by the Commission for the purpose of fully effectuating the objects and intent of this agreement;

(e) To furnish a free right of way for the railway and for the power lines of the Commission over any property of the corporations upon being so requested by the Commission, and to execute such conveyance thereof or agreement with regard thereto as may be desired by the Commission.

3. It shall be lawful and the Commission is hereby authorized to create or cause to be created an issue of bonds, and to sell or dispose of the same on behalf of the corporations. Such bonds to be charged upon and secured by the railway, and all the assets, rights, privileges, revenues, works, property and effects belonging thereto or held or used in connection with the railway constructed, acquired, operated and maintained by the Commission under this agreement, and to be for the total amounts mentioned in schedule "B" hereto attached; provided that the Commission may, upon obtaining the consent as herein defined of the majority of the corporations, increase the said bond issue by any amount necessary to cover the capital cost of extending the railway, and may also without such consent increase the said bond issue to cover the cost of additional works or equipment of any kind for use on the railway to an extent not exceeding ten per cent. (10%) of the bonds issued from time to time. In order to meet and pay such bonds and interest as the same becomes due and payable the Commission shall in each year after the expiration of ten years from the date of the issue of the bonds out of the revenue of the railway after payments of operating expenses (including electrical power) and the cost of administration set aside a sufficient sum to provide a sinking fund for the purpose of redeeming the same at maturity. Debentures issued by the corporations in compliance with clause 2b hereof, shall, to the extent of the par value of any bonds outstanding from time to time, be held or disposed of by the Commission in trust for the holders of such bonds as collateral security for payment thereof, it being understood and agreed that in the event of any increase of the said bond issue each corporation shall, upon the request of the Commission, deposit with the Commission additional debentures as described in clause 2b hereof, to be held or disposed of by the Commission as collateral security for such increase of the said bond issue, and that any debenture held by the Commission in excess of the par value of the outstanding bonds from time to time may be held or disposed of by the Commission to secure payment of any deficit arising from the operation of the railway.

4. In the event of the revenue derived from the operation of the undertaking being insufficient in any year to meet the operating expenses (including electrical power), the cost of administration and the annual charges for interest and sinking fund on the bonds, and for the renewal of any works belonging in whole or in part to the railway, such deficit shall be paid to the Commission by the corporations upon demand of and in the proportion adjusted by the Commission. In the event of the failure of any corporation to pay its share of such a deficit as adjusted by the Commission, it shall be lawful for the Commission in the manner provided in clause 2b to dispose of debentures held by the Commission as security for any such deficit. Any arrears by any corporation shall bear interest at the legal rate.

5. Should any corporation fail to perform any of the obligations to the Commission under this agreement, the Commission may, in addition to all other remedies and without notice, discontinue the service of the railway to such corporation in default until the said obligation has been fulfilled, and no such discontinuance of service shall relieve the corporation in default from the performance of the covenants, provisoes and conditions herein contained.

6. In case the Commission shall at any time or times be prevented from operating the railway or any part thereof by strike, lockout, riot, fire, invasion, explosion, act of God, or the King's enemies, or any other cause reasonably beyond its control, then the Commission shall not be bound to operate the railway or such part thereof during such time; but the corporations shall not be relieved from any liability or payment under this agreement, and as soon as the cause of such interruption is removed the Commission shall, without any delay, continue full operation of the railway, and each of the corporations shall be prompt and diligent in doing everything in its power to remove and overcome any such cause or causes of interruption.

7. It shall be lawful for, and the corporations hereby authorize the Commission to unite the business of the railway with that of any other railway system operated in whole or in part by the Commission, and to exchange equipment and operators from one system to the other, proper provision being made so that each system shall pay its proportionate share of the cost of any equipment used in common.

8. If at any time any other municipal corporation applies to the Commission for an extension of the railway into its municipality the Commission shall notify the applicant and the corporations, in writing, of a time and place to hear all representations that may be made as to the terms and conditions relating to such proposed extension. If, on the recommendation of the Commission, such extension shall be authorized, without discrimination in favor of the applicant, as to the cost incurred or to be incurred for or by reason of any such extension, the Commission may extend the railway upon such terms and conditions as may appear equitable to the Commission.

No such application for an extension of the railway into any municipality the corporation of which is not a party to this agreement shall be granted if it is estimated by the Commission that the cost of service of the railway to the corporations parties hereto will be thereby increased or the revenue and accommodation be injuriously affected without the written consent of the majority of the corporations parties hereto.

9. The consent of any corporation required under this agreement shall mean the consent of the council of such corporations, such consent being in the form of a municipal by-law duly passed by the council of the corporation.

10. The Commission shall, at least annually, adjust and apportion between the corporations the cost of construction, equipment, operation, interest, sinking fund, and also the cost of renewing the property of the railway.

11. Every railway and all the works, property and effects held and used in connection therewith, constructed, acquired, operated and maintained by the Commission under this agreement and the said Act shall be vested in

the Commission on behalf of the corporations; but the Commission shall be entitled to a lien upon the same for all money expended by the Commission under this agreement and not repaid.

12. Each of the corporations covenants and agrees with the other:

(a) To carry out the agreements and provisions herein contained:

(b) To co-operate by all means in its power at all times with the Commission to create the most favourable conditions for the carrying out of the objects of the agreement and of the said Act, and to increase the revenue of the railway and ensure its success.

13. In the event of any difference between the corporations the Commission may, upon application, fix a time and place to hear all representations that may be made by the parties, and the Commission shall adjust such differences and such adjustments shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act Respecting Enquiries Concerning Public Matters*.

14. This agreement shall continue and extend for a period of fifty years from the date hereof, and at the expiration thereof be subject to renewal, with the consent of the corporations from time to time for like periods of fifty years, subject to adjustment and reapportionment as herein provided for the purposes of this agreement as though the terms hereof had not expired. At the expiration of this agreement the Commission shall determine and adjust the rights of the corporations, having regard to the amounts paid or assumed by them respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

15. It is understood and agreed that the rates imposed for the share of the cost to be borne by those municipalities listed in schedule "C" attached hereto, shall be imposed upon the rateable property set forth respectively in the said schedule.

16. This agreement shall not come into effect until it has been sanctioned by the Lieutenant-Governor in Council.

In witness whereof the Commission and the corporations have respectively affixed their corporate seals and the hands of their proper officers.

SCHEDULE "A."

ROUTES.

Tecumseh-Ford Section.

Leaving Tecumseh the line runs northerly alongside of the Highway to Askin's Point on Lake St. Clair, where it turns due west along Lesperance Road to Wolfs; private right-of-way is then used to the end of Ottawa Avenue and then along the said avenue to the easterly limits of the Town of Ford City.

Ford City Section.

From the easterly limits of Ford City the line extends along Ottawa Avenue, Strabane and Sandwich Streets to the westerly limit of the municipality.

Walkerville Section.

One line extends along Sandwich Street from the easterly to the westerly limits of the municipality. A second line extends along Ottawa Street between Lincoln and Walker Roads. A third line extends from the Essex Terminal railway tracks at Walker Road, northerly to Wyandotte Street and west on Wyandotte to the municipal boundary between Walkerville and Windsor. A fourth line extends northerly from Wyandotte along Devonshire Road, Assumption and Victoria Roads to intersect the first line, above-mentioned, on Sandwich Street.

Windsor City Section.

One line extends westerly along Sandwich Street from the municipal boundary of the Town of Walkerville to Elm Avenue and then southerly on the said Avenue to London Street. A second line extends westerly from the Walkerville boundary on Wyandotte Street to Ouellette Avenue. A third line extends southerly on Ouellette Avenue from Sandwich to the Race Track that is located on Tecumseh Road. A fourth line extends westerly on London Street from Ouellette to the westerly boundary of the City. A fifth line extends southerly on Wellington Avenue from London Street to Tecumseh Road.

Sandwich Town Section.

From the easterly boundary of the municipality the line extends westerly to the Springs Loop near the Salt Company's plant at the west end of the municipality.

Sandwich-Amherstburg Section.

From the Springs Loop in Sandwich the line extends along Redford Street and Main Street, Ojibway, to the River Road at Turkey Creek, and then due south along the said River Road to the Town of Amherstburg, entering the said town along Apsley and Richmond Streets.

SCHEDULE "B."

Name of Municipal Corporation.	Total amount of debentures to be issued by respective municipalities for deposit with the Commission under clause 2b.
Township of Sandwich East	\$260,685
Township of Sandwich West	251,570
Township of Anderdon	143,536
Town of Ford City	64,582
Town of Walkerville	200,940
Town of Sandwich	262,173
Town of Ojibway	44,515
Town of Amherstburg	126,867
City of Windsor	745,132
Total amount of bonds to be issued mentioned in clause 3	
\$2,100,000	

SCHEDULE "C."

This agreement, made the 14th day of January, one thousand nine hundred and twenty,

Between

Detroit United Railway, a corporation organized and existing under the laws of the State of Michigan, hereinafter called the "Vendor," of the first part;

and

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Purchaser," of the second part;

and

Sandwich, Windsor & Amherstburg Railway, hereinafter called the "Sandwich Company," of the third part;

and

The Windsor & Tecumseh Electric Railway Company, hereinafter called the "Windsor Company," of the fourth part.

Whereas the Vendor owns and controls all the outstanding shares of the capital stock of the Sandwich Company, and all the outstanding shares of the capital stock of the Windsor Company, all of the said shares being fully paid up;

And whereas the Vendor has agreed to sell and the Purchaser has agreed to purchase all the assets and undertakings and property of the said companies for the consideration hereinafter mentioned;

Now this agreement witnesseth:—

1. The Vendor agrees to sell and the Purchaser agrees to purchase, as of July 1st, 1919, all the assets, undertakings and property of every kind and nature belonging to the said companies, or to which the said companies, or either of them, are or is entitled in connection with their or its business, viz.:

- (a) All freehold and leasehold lands, easements and interests in lands;
- (b) All plant, machinery, rolling stock, works, buildings, fixtures, equipment, apparatus, furniture, stock in trade, stores, goods, chattels and effects, other than supplies as hereinafter defined;
- (c) All franchises, patents, licenses, agreements and rights, and all documents, including title deeds, contracts, books of account, plans, records and specifications;
- (d) All the outstanding shares of the capital stock of each of the said companies fully paid up, and all shares or other securities in any subsidiary company belonging to the companies or either of them;

(e) All other property to which the said companies or either of them are or is entitled in connection with their or its business, except cash, promissory notes, book accounts, and other bills and accounts receivable, as of the date of completion hereinafter mentioned.

It is understood and agreed that the Vendor shall be entitled to retain, and shall not be obligated to give to the Purchaser, any profits made in carrying on the business of the companies between the said July first, 1919, and the date of completion of this agreement, as hereinafter defined.

For greater certainty, but without restricting the generality of the foregoing, an inventory of assets and undertakings and property of the said companies, as of the said date, is attached to this agreement as schedule "A."

2. The consideration for the sale shall be:

(a) The sum of two million and thirty-nine thousand dollars (\$2,039,000.00), which shall be paid and satisfied by the issue and delivery, in the manner hereinafter described, of bonds of the Hydro-Electric Power Commission of Ontario, of one thousand dollars (\$1,000) each, bearing the date of completion, hereinafter defined, and payable forty years from said date in gold coin of, or equivalent to, the present Canadian standard of weight and fineness, with interest thereon at the rate of four and one-half per cent. per annum, payable half-yearly in like money at the main branch of the Bank of Montreal in the City of Toronto; and guaranteed as to principal and interest by the Province of Ontario;

(b) Payment in cash at the market price for the material and supplies which may be on hand on the date of completion of this agreement, belonging to either of the said companies, on said date, in accordance with an inventory thereof to be prepared by the Vendor, and verified and agreed to by the Purchaser; such inventory to include material of the classes and character shown in inventory dated October, 1919, and submitted to the Commission with letter of November third, 1919, and to be identified at the time of the execution of this agreement;

(c) The cost of any extensions and improvements, which are properly chargeable to capital account, and which are made after the signing of this agreement, shall be added to the consideration, but such extensions and improvements shall not be made without notice to and the consent of the Purchaser.

3. The Vendor covenants with the Purchaser that the assets, undertakings and property of the said companies are free from all encumbrances, except the following:—

(a) Trust mortgage by the Sandwich Company, dated December first, 1902, to National Trust Company, Limited, to secure the payment of bonds to the amount of six hundred thousand dollars (\$600,000.00), all of which have been issued and are outstanding and become due as to principal on December first, 1922, and have attached thereto interest coupons at the rate of four and one-half per cent. per annum, payable on the first days of June and December in each year during the currency of said bonds;

(b) Trust mortgage by the Windsor Company, dated September second, 1907, to National Trust Company, Limited, to secure bonds to the amount of

three hundred thousand dollars (\$300,000.00), of which have been issued and are outstanding bonds to the amount of one hundred and eighty-nine thousand dollars (\$189,000.00), which become due as to principal on September second, 1927, and have attached thereto interest coupons at the rate of five per cent. per annum, payable on the second days of March and September in each year during the currency of the said bonds.

4. The Purchaser will, on the date for the completion of this agreement, deliver to the Vendor one million two hundred and fifty thousand dollars (\$1,250,000.00) par value of the said Hydro-Electric bonds, and will deliver to said National Trust Company, Limited, of Toronto, seven hundred and eighty-nine thousand dollars (\$789,000.00) of the said bonds in escrow, to be delivered in whole or in part to the Vendor, upon the payment and retirement, either at maturity or prior thereto, from time to time, of the whole or any part of the said outstanding bond issues of the said companies, aggregating seven hundred and eighty-nine thousand dollars (\$789,000.00), on the basis of the same amount in par value of the bonds so delivered in escrow against the same amount of bonds so paid off and retired. The Purchaser will cause the interest coupons on the bonds so held in escrow to be delivered to the Vendor or its nominees as such coupons fall due, provided that the Vendor will mutually cause to be delivered to the Purchaser the interest coupons on the bonds of the said companies, duly paid and cancelled from time to time, as they fall due.

5. The Vendor covenants with the Purchaser that the Vendor will pay and discharge the said mortgages mentioned in paragraph three hereof, and will pay and retire the principal of the said bonds of the companies, aggregating seven hundred and eighty-nine thousand dollars (\$789,000.00), and all interest coupons thereon, and that the other liabilities of the companies or either of them, whether direct, indirect, contingent, accruing, or accrued, at the time of completion, shall be only those described in schedule "B" hereof, which are to be adjusted to date of completion, and the Vendor covenants with the Purchaser that it will pay and settle all other liabilities not therein mentioned and indemnify the Purchaser from any claim in connection therewith.

6. All current contracts, taxes, local improvement rates, assessments, rents, insurance and interest (other than the interest on the said bonds, to be paid by the Vendor), shall be adjusted as of the date of completion, and the balance paid in cash by the Vendor or Purchaser, as the case may be. If any estimate shall, after completion, prove inaccurate, the excess or deficiency, when determined, shall be paid by the party liable.

7. The Vendor agrees to assume all liabilities for injuries and damages of the said companies, or either of them, which may arise prior to the said date of completion, and covenants to protect and save harmless the Purchaser from all claims in connection therewith, and to defend at its own expense any legal proceedings which may be brought in respect thereof;

8. The Vendor agrees to pay to the Purchaser the value of all revenue tickets sold by either of the companies prior to the said date of completion that are taken up for fare, or presented for redemption, for a period of sixty days after the said date of completion forthwith upon the delivery of such tickets by the Purchaser to the Vendor;

9. The Vendor agrees that the companies will, until the date for completion, repair and keep in repair and good working order and condition, reasonable wear and tear only excepted, all assets, undertakings and property of the said companies, and will, pending said date for completion, carry on the respective businesses of the companies in the usual and ordinary manner; and that the assets and property of the companies as of the date of completion will be of not less value than those described in paragraph one and schedule "A" hereof;

10. The Vendor agrees that neither of the said companies will, before the said date of completion, create or issue any further shares of their capital stock respectively, or any bonds, debentures or like securities; and that neither of the said companies will surrender any of their franchise rights or privileges, or do, permit, or permit to be done, or do any act or thing whereby any such rights or privileges may become forfeited or terminated, or liable to forfeiture or termination; and that after completion of this agreement the Vendor will, upon the request and at the expense of the Purchaser, furnish to the Purchaser any and all information in connection with the affairs of the said companies or either of them;

11. Upon the completion of the sale under this agreement the Vendor will cause to be tendered the resignation of all directors of each of the said companies, and undertakes that the boards of directors of the said companies will assist the Purchaser in the acceptance of such resignations and in the election of new directors nominated by the Purchaser and will cause to be tendered the resignation of all officers of the said companies respectively, or cause their employment to be terminated as of the date of completion.

12. This agreement is subject to the following conditions:—

(a) The approval thereof by the Lieutenant-Governor of the Province of Ontario in Council;

(b) The passing by the municipalities in the Province of Ontario affected thereby of the necessary by-laws;

(c) The passing by the Ontario Government of an Order-in-Council authorizing the guarantee by the Province of Ontario of the Hydro-Electric bonds referred to in paragraph three hereof;

13. The date for completion of this agreement shall be sixty days after the fulfilment of the conditions stated in the next preceding clause. The Purchaser shall notify the Vendor as soon as the said conditions have been fulfilled, and not later than January 31st, 1920, that it is prepared to carry out its part of this agreement within sixty days after the fulfilment of the said conditions, whereupon the Vendor shall be prepared within such time to carry out and complete its part of this agreement. Failure on the part of the Purchaser to notify the Vendor, as above provided, shall entitle the Vendor to declare this agreement null and void.

14. The Purchaser shall have thirty days after the giving of the said notice in which to examine the titles and franchises of the companies. The Vendor shall not be obliged to deliver any abstract of title or incur any expense in connection with such examination, but will cause the Purchaser to be permitted to inspect all documents relating to such titles and franchises. If any objection or requisition in respect thereto be made by the

Purchaser which the Vendor may be unwilling to comply with, the Vendor shall have the right to rescind this agreement by written notice, provided that the Purchaser may waive such objection or requisition by giving notice in writing to that effect within fifteen days after the receipt of such notice of rescission, and thereupon this agreement shall remain in full force and effect as though such objection or requisition had never been made. If the Purchaser shall not have made any requisition or objection to the said titles and franchises within the said period of thirty days, or if all requisitions or objections so made have been removed or complied with or waived, the Purchaser shall be deemed to have accepted the said titles and franchises.

15. The Sandwich Company and the Windsor Company and each of them assents to this agreement, and agree and each of them agrees with the Purchaser that they and each of them will, at the expense of the Vendor, facilitate in all reasonable ways the due carrying out of all the terms of this agreement to be carried out by the Vendor, and that they and each of them will act in such manner as the Vendor has herein covenanted that they and each of them will act.

16. This agreement shall be construed according to the law of the Province of Ontario, and the completion thereof shall take place at the office of the Purchaser at Toronto, Ontario.

17. The obligations, rights and benefits of the Vendor and Purchaser shall be binding upon and extend and enure to their successors and assigns respectively.

In witness whereof these presents have been duly executed by the parties hereto the date and year first above written.

Signed, Sealed and Delivered in the presence of	}	DETROIT UNITED RAILWAY.
		By A. F. EDWARDS,
		<i>Vice-President.</i>
Attest.	(Seal.)	THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.
		By I. B. LUCAS,
		<i>Vice-Chairman.</i>
		By W. W. POPE, <i>Secretary.</i>
	(Seal.)	SANDWICH, WINDSOR AND AMHERSTBURG RAILWAY.
Attest.		By JAMES ANDERSON,
		<i>Vice-President.</i>
Attest.		THE WINDSOR & TECUMSEH ELECTRIC RAILWAY COMPANY.
		By JAMES ANDERSON,
	(Seal.)	<i>Vice-President.</i>
		(Seal.)

An Act to amend The Power Commission Act

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

1. This Act may be cited as *The Power Commission Act, 1920*. Short title.
2. Section 8 of *The Power Commission Act* is amended by adding thereto the following clause: Rev. Stat. c. 39, s. 8, amended.
 - (aa) Acquire by purchase, lease or otherwise or construct, erect, maintain and operate works for the production of electrical power or energy by the use of coal, oil or any other means whatsoever. Works for production of electricity.
3. *The Power Commission Act* is amended by adding thereto the following sections:— Rev. Stat. c. 39, amended.
 - 21a. Notwithstanding anything contained in section 21 it shall not be necessary to obtain the approval of the Lieutenant-Governor in Council to any contract for a supply of electrical power or energy by the Commission to any person from works which the Commission has acquired or constructed and is operating for the distribution of electrical power or energy; Approval of Lieutenant-Governor in Council not required to certain contracts.
 - 21b. Where the Commission has heretofore entered or shall hereafter enter into an agreement for the supplying of electrical power or energy or for any other work or service to be done or supplied by or to the Commission, and such agreement has been or shall hereafter be submitted to and approved by the Lieutenant-Governor in Council such agreement shall thereupon be confirmed and be legal, valid and binding upon the parties thereto and shall not be open to question upon any grounds whatsoever, anything in this Act or in any other Act to the contrary notwithstanding. Effect of approval of agreements by Commission.
4. *The Power Commission Act* is amended by adding thereto the following section: Rev. Stat. c. 39, amended.
 - 24b. Where the appropriation made by the Legislature for any work of the Commission shall become exhausted in any fiscal year and the chairman reports to the Lieutenant-Governor in Council that it is necessary and expedient that such work shall be proceeded with and that an additional sum is required for that purpose, the Lieutenant-Governor in Council may order a special warrant to be prepared to be signed by the Lieutenant-Governor for the issue of the amount estimated to be required in such fiscal year, and when issued such amount shall be placed by the Treasurer of Ontario to the credit of a special account against which cheques may be issued in favour of the Commission for such amounts as shall be required. Where appropriation is exhausted special warrant may issue.

Rev. Stat.
c. 39,
amended.

5. *The Power Commission Act* is amended by adding thereto the following sections:

PART IIB.

Construction and Operation of Distribution Works in Rural Power Districts.

Contracts
for con-
struction
and opera-
tion of dis-
tribution
works in
townships.

30e. Subject to the approval of the Lieutenant-Governor in Council, the Commission may enter into a contract with the municipal corporation of a township or with the municipal corporations of two or more townships for the supply and distribution of electrical power or energy in a defined area (hereinafter called a rural power district), including a part of such township or parts of each of such townships, and the Commission may, in pursuance of such contract, construct and operate all works necessary for the transmission of electrical power or energy to the rural power district and for the transforming and distributing of such electrical power or energy to the premises of the persons within the rural power district as so defined or as enlarged or altered from time to time by the Commission with the approval of the Lieutenant-Governor in Council and the municipal council or councils.

By-law.

30f. The council of the township or the council of each of such townships party to such contract, may pass a by-law for entering into such contract and may execute the same, and it shall not be necessary to submit any such by-law to the vote of the electors or to comply with any of the other forms required in the case of a by-law passed under Part I of this Act.

Apportion-
ment of cost
on annual
adjustment.

30g.—(1) The Commission shall annually fix, adjust and apportion the cost of all the works mentioned in section 30e to be borne by each of the municipal corporations entering into such contract.

Amount of
contribu-
tions by
townships.

(2) The total amount for which each of the corporations shall be liable shall include a sum sufficient to provide annually the corporation's proportionate cost of the capital cost of the work so as to form in thirty years a sinking fund for the payment of the amount expended by the Commission on capital account for the acquisition or construction of the works necessary for transmitting, transforming, distributing and delivering electrical power or energy in a rural power district and a further sum sufficient to pay the Commission interest upon the proportionate part of such expenditure to be borne by the corporation, and a further sum to pay the corporation's proportionate part of the line loss and the costs of operating, maintaining, renewing and insuring of such works and of the other charges set out in section 23.

- 30h. The rates to be charged to customers receiving electrical power or energy from the Commission in a rural power district shall be fixed by the Commission from time to time and shall be sufficient to provide the sum necessary to pay all the charges to be borne by the corporation under section 30g. Rates.
- 30i. All the provisions of Part I as to the annual payments to be made by the corporations which have entered into contracts with the Commission shall apply to a contract entered into under this Part. Application of Part I.
- 30j. Where any person receiving a supply of electrical power or energy in a rural power district is in default of payment of any account due in respect of such supply, the Commission may notify the corporation of the municipality in which the premises of the person so in default are situate stating the amount due and such amount shall thereupon be entered upon the collector's roll of the municipality and collected in the same manner as other taxes. Collection of rates in arrear.
- 6.** By-law No. 38 of the Corporation of the Town of Port Colborne; By-law No. 780 of the Corporation of the Town of Niagara; By-laws Nos. 796, 808 and 809 of the Corporation of the Town of Carleton Place; By-laws Nos. 320 and 323 of the Corporation of the Town of Alexandria; By-laws 257 and 258 of the Corporation of the Village of Glencoe; By-law No. 461 of the Corporation of the Village of Markham; By-laws Nos. 413 and 414 of the Corporation of the Village of Maxville; By-law No. 634 of the Corporation of the Township of Ancaster; By-laws Nos. 720 and 732 of the Corporation of the Township of London; By-law No. 495 of the Corporation of the Township of Eldon; By-law No. 55 of the Corporation of the Township of Scott; By-laws Nos. 2480 and 2523 of the Corporation of the City of Windsor; By-law No. 721 of the Corporation of the Town of Uxbridge; By-law No. 503 of the Township of Eldon, covering the Police Village of Kirkfield; By-law No. 775 of the Corporation of the Village of Port Perry; By-law No. 20 of 1919 of the Township of Artemesia, covering the Police Village of Priceville; By-law No. 7 of 1919 of the Corporation of the Village of Lucknow; By-law No. 10 of 1919 of the Corporation of the Village of Teeswater; By-law No. 817 of the Corporation of the Town of Wingham; By-law No. 603 of the Corporation of the Town of Kincardine; By-law No. 448 of the Corporation of the Village of Norwood; By-law No. 269 of the Corporation of the Village of Havelock; By-law No. 565 of the Corporation of the Village of Lakefield; By-law No. 389 of the Corporation of the Village of Lancaster; By-law No. 352 of the Corporation of the Village of Chippawa; By-law No. 1 of 1919 of the Corporation of the Township of Stamford; By-law No. 2 of 1919 of the Corporation of the Township of Stamford; and all debentures issued or to be issued or purporting to be issued, under any of the said by-laws which authorize the issue of debentures, are confirmed and declared to be legal, valid and binding upon such corporations and the ratepayers thereof, respectively, and shall not be open to question upon any ground By-laws confirmed.

whatsoever, notwithstanding the requirements of *The Power Commission Act*, or the amendments thereto, or any other Act of this Legislature.

Certain corporations added as parties to contract with Commission.

7. The Municipal Corporation of the Town of Port Colborne, the Municipal Corporation of the Town of Niagara, the Municipal Corporation of the Village of Glencoe, the Municipal Corporation of the Village of Markham, the Municipal Corporation of the Township of Ancaster, the Municipal Corporation of the Township of London, are added as parties of the second part to the contract set out in schedule "A" to *The Power Commission Act, 1909*, as varied, confirmed and amended by the Act passed in the tenth year of the reign of His Late Majesty King Edward VII, chaptered 16 and by subsequent Acts, and by this Act, and the said contract shall be binding upon the parties thereto respectively, as to the Town of Port Colborne from the 22nd January, 1920; as to the Town of Niagara from the 14th April, 1919; as to the Village of Glencoe from the 14th October, 1919; as to the Village of Markham from the 7th March, 1919; as to the Township of Ancaster from the 11th April, 1919; and as to the Township of London from the 10th May, 1919.

Names of municipalities added to schedule.

8. The names of the said municipalities are added to schedule "B" of the said contract, and such schedule shall be read as containing the particulars set out in schedule "A" to this Act.

Contracts confirmed.

9. The agreements set out in schedules "B," "C," "D," "E," "F," "G" and "H" between the Town of Carleton Place, the Town of Alexandria, the Village of Maxville, the Township of Eldon, the Township of Scott, the Board of Water Commissioners of the Municipal Corporation of the Town of Lindsay, the Municipal Corporation of the Village of Lancaster, and the Commission are hereby confirmed and declared to be legal, valid and binding upon the parties thereto, respectively, and shall not be open to question upon any grounds whatsoever, notwithstanding the requirements of *The Power Commission Act* or amendments thereto or any other Act of this Legislature.

Contracts confirmed.

10. The agreements set out in schedules "I," "J" and "K" between the Corporation of the Village of Lakefield, the Corporation of the Village of Havelock, the Corporation of the Village of Norwood, the Corporation of the Town of Uxbridge, the Police Village of Kirkfield, the Village of Port Perry, the Corporation of the Town of Wingham, the Village of Lucknow, the Village of Teeswater, the Police Village of Priceville, the Police Village of Ripley, and the Commission are hereby confirmed and declared to be legal, valid and binding upon the parties thereto, respectively, and shall not be open to question upon any grounds whatsoever, notwithstanding the requirements of *The Power Commission Act* or amendments thereto, or any other Act of this Legislature.

Commencement of Act.

11. This Act shall come into force and take effect on the day upon which it receives the Royal Assent.

SCHEDULE "A."

Name of Municipal Corporation.	Quantity of Power Applied for in H.P.	Maximum Price of Power at Niagara Falls.	Number of Volts.	Estimate maximum cost of power ready for distribution in municipality.	Estimate proportionate part of costs to construct transmission line, transformer station and works for nominally 30,000 H.P., with total capacity of 60,000 H.P.	Estimate proportionate part of line loss and of part cost to operate, maintain, repair, renew and insure transmission line, transformer station and works for nominally 30,000 H.P. with total capacity of 60,000 H.P.
Port Colborne	150	....	....	\$21 00	\$8,256 00	\$789 00
Niagara	150	....	....	28 00	16,236 00	1,163 00
Markham	60	....	....	48 62	18,350 00	973 00
Glencoe	75	....	....	78 35	39,804 00	2,312 00
London Tp.	25	....	....	(note)	.....	.....
Ancaster Tp.	50	....	....	25 81	5,089 00	464 00

NOTE.—(Re London Township.)

The cost of power shall be \$21 per horse-power, plus cost of transmitting such power from the Commission's nearest high tension station to the point of delivery.

This Agreement dated the 22nd day of January, 1920.

Between

Hydro-Electric Power Commission of Ontario, herein called the "Commission," party of the first part;

and

Municipal Corporation of the Town of Port Colborne, herein called the "Corporation," party of the second part.

Whereas the City of Toronto and other municipalities named in column 1 of the schedule of the agreement dated 4th May, 1908, hereto attached and marked "A" have agreed with the Commission for a supply of power from Niagara Falls;

And whereas the Corporation under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power, and has passed a By-law No. 38, passed the 26th day of August, 1919, to authorize the execution of an agreement therefor.

Now this indenture witnesseth that in consideration of the premises the Commission agrees to supply to the Corporation one hundred and fifty (150) horse power of electrical power upon the terms and conditions set forth in

said agreement of 4th May, 1908, and the Corporation agrees with the Commission upon the said terms and conditions therein set out; Provided that the said terms and conditions may be modified pursuant to Paragraph 11 of the said agreement, but subject to such modifications, the Corporation shall be deemed to have been a party to the said agreement, and the figures set forth in the columns of the schedule of the said agreement hereto attached opposite the name of the Town of Port Colborne shall be deemed to have been inserted therein at the date thereof.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) I. B. LUCAS, *Vice-Chairman*,
(Seal)

(Sgd.) W. W. POPE, *Secretary*.

CORPORATION OF THE TOWN OF PORT COLBORNE.

(Sgd.) A. D. CROSS, *Mayor*.
(Seal)

(Sgd.) DAVE ALAIR, *Clerk*.

This Indenture made the 4th day of May, 1908.

Between

The Hydro-Electric Power Commission of Ontario, acting herein on its own behalf and with the approval of the Lieutenant-Governor in Council (hereinafter called the Commission), party of the first part;

and

The Municipal Corporations of Toronto, London, Guelph, Stratford, St. Thomas, Woodstock, Berlin, Galt, Hespeler, St. Mary's, Preston, Waterloo, New Hamburg, and Ingersoll (hereinafter called the Corporations), parties of the second part.

Whereas, pursuant to an Act to provide for transmission of electrical power to municipalities, the Corporations applied to the Commission to transmit and supply such power from Niagara Falls, and the Commission entered into contracts, hereto attached, with the Ontario Power Company of Niagara Falls (hereinafter called the Company), for such power at the prices set forth in the schedule, hereto attached, and the Commission furnished the Corporations with estimates, as shown in the schedules of the total cost of power, ready for distribution within the limits of the Corporations, and the electors of the Corporations assented to By-laws authorizing the Corporations to enter into a contract with the Commission for such power, and the Commission have estimated the line loss and the cost to construct, operate, maintain, repair, renew and insure a line to transmit, nominally, 30,000 horse power with a total capacity of 60,000 horse power of such power to the Corporations, and have apportioned the part of such cost to be paid by each Corporation as shown in said schedule;

Now, therefore, this indenture witnesseth that in consideration of the premises and of the agreements of the Corporations herein set forth, subject to the provisions of said Act of the said contracts, the Commission agrees with the Corporations respectively:—

1.—(a) To construct a line to transmit the quantities of electric power, shown in column 2 of the said schedule, from Niagara Falls to the Corporations shown in column 1, respectively.

(b) On the 1st day of May, 1920, or on any earlier day on which the Commission shall be prepared to supply the same, to supply said power in quantities set forth in column 2 of said schedule, or as a minimum 40 per cent. less, if written notice of minimum required is given on or before 19th July, 1909, to the Corporations within the limits thereof, ready for distribution at approximately the number of volts set forth in column 4 of said schedule, and approximately 25 cycles per second frequency.

(c) At the expiration of three months' written notice, which may be given by the Corporations or any of them from time to time during the continuance of this agreement, to supply from time to time to the Corporations in blocks of not less than 1,000 horse power each, additional power until the total amount so supplied shall amount to 30,000 horse power.

(d) At the expiration of nine months' like notice which may be given by the Corporations or any of them from time to time during the continuance of this agreement, to supply from time to time to the Corporations in blocks of not less than 1,000 horse power each, additional power until the total amount so supplied shall amount to 100,000 horse power.

(e) To use at all times first-class, modern, standard, commercial apparatus and plant and to exercise all due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Corporations.

In consideration of the premises and of the agreements herein set forth each of the Corporations for itself, and not one for the other, agrees with the Commission:—

2.—(a) Subject to the provisions of paragraph 2 (g), hereof, to pay the Commission for the quantities of power shown in column 2 of said schedule, or 40 per cent. less as a minimum, to be supplied at said date, and for such additional power supplied or held in reserve upon such notices, the price set forth in column 3 of said schedule in twelve monthly payments, in gold coin of the present standard of weight and fineness, and bills shall be rendered by the Commission on or before the fourth and paid by the Corporation on or before the fifteenth of each month. If any bill remains unpaid for fifteen days, the Commission may, in addition to all other remedies and without notice, discontinue the supply of such power to the Corporations in default until said bill is paid. No such discontinuance shall relieve the Corporation in default from the performance of covenants, provisoes, and conditions therein contained. All payments in arrears shall bear interest at the legal rate.

(b) To take electric power exclusively from the Commission during the continuance of this agreement; provided, if the Commission is unable to supply said power as quickly as required, the Corporations may obtain the supply otherwise until the Commission has provided such supply, thereupon the Corporations shall immediately take from the Commission; and the Corporations may generate, store or accumulate electric power for emergencies, or to keep down the peak load of the power taken from the Commission; and nothing herein contained shall affect existing contracts between the Cor-

porations and other parties for a supply of electric power, but the Corporations shall determine said contracts at the earliest date possible.

(c) To pay, annually, interest upon its proportionate part of the moneys expended by the Commission on capital account for the construction of the said line, transformer stations and other necessary works shown, respectively, in column 6 of said schedule, subject to adjustment under paragraph 10.

(d) To pay an annual sum for its proportionate part of the cost of the construction of said line, stations and works, shown, respectively, in column 6 of said schedule, subject to adjustment under paragraph 10, so as to form in thirty years a sinking fund for the retirement of the securities to be issued by the Province of Ontario.

(e) To bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said line, stations and works, shown, respectively, in column 7 of said schedule, subject to adjustment under paragraph 10.

(f) To keep, observe and perform the covenants, provisoes and conditions set forth in said contracts, intended by the Commission and the Company to be kept and observed and performed by the Corporations.

(g) To pay for three-fourths of the power supplied and held in reserve at said date upon said notices, whether the said power is taken or not, and when the greatest amount of power taken for twenty consecutive minutes in any month shall exceed three-fourths of the amount during such twenty consecutive minutes, so supplied and held in reserve, to pay for this greater amount during that entire month. When the power factor of the greatest amount of power taken for said twenty minutes falls below 90 per cent. the Corporation shall pay for 90 per cent. of said power divided by the power factor.

(h) To take no more power than the amount to be supplied and held in reserve at said date and upon said notices.

(i) To use at all times first-class, modern, standard, commercial apparatus and plant to be approved by the Commission.

(j) To exercise all due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Commission and the Company.

3. If, as therein provided, the said contracts are continued until 19th December, 1939, this agreement shall remain in force until that date.

4. Said power shall be three-phase, alternating, commercially continuous twenty-four hour power every day of the year except as provided in paragraph 6 hereof, and shall be measured by curve-drawing meters, subject to test as to accuracy by either party hereto.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time during the continuance of this agreement to inspect the apparatus, plant and property of the Corporations, and take

records at all reasonable times on giving to the Corporation six hours' notice of the intention to make such inspection. The Corporations shall have a like right on giving a like notice to inspect the apparatus plant and property of the Commission.

6. In case the Commission or the Company shall at any time or times be prevented from supplying said power, or any part thereof, or in case the Corporation shall at any time be prevented from taking said power, or any part thereof, by strike, lock-out, riot, fire, invasion, explosion, act of God or the King's enemies, or any other cause reasonably beyond their control, then the Commission shall not be bound to deliver such power during such time and the Corporations shall not be bound to pay the price of said power at Niagara Falls during such time, but the Corporations shall continue to make all other payments, but as soon as the cause of such interruption is removed the Commission shall without any delay supply said power as aforesaid and the Corporations shall take the same and each of the parties hereto shall be prompt and diligent in removing and overcoming such cause or causes of interruption.

7. If, and so often as, any interruption shall occur in the service of the Company due to any cause or causes, other than those provided for by the next preceding paragraph hereof, the Commission shall recover and pay to the Corporations as liquidated and ascertained damages and not by way of penalty, as follows:—For any interruption less than one hour, double the amount payable for power which should have been supplied during the time of such interruption; and for any interruption of one hour or more, the amount payable for the power which should have been supplied during the time of such interruption and twelve times the last mentioned amount in addition thereto, and all moneys payable under this paragraph when the amount thereof is settled between the Commission and the Company may be deducted from any moneys payable by the Corporations to the Commission, but such right of deduction shall not in any case delay the said monthly payments.

8. The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the sub-station in the limits of the Corporation shall constitute the supply of all power involved herein and the fulfilment of all operating obligations hereunder; and when voltage and frequency are so maintained, the amount of the power, its fluctuation load factor, power factor, distribution as to phases, and all other electric characteristics and qualities are under the sole control of the Corporations, their agents, customers, apparatus, appliances and circuits.

9. In case any municipal corporation, or any person, firm or corporation which shall contract with the Commission or with any municipal corporation for a supply of power furnished to the Commission by the Company shall suffer damages by the act or neglect of the Company, and such municipal corporation, person, firm or corporation would, if the Company had made the said contracts directly with them, have had a right to recover such damages or commence any proceedings or any other remedy, the Commission shall be entitled to commence any such proceeding or bring such action for or on behalf of such municipal corporation, person, firm, or corporation, and notwithstanding any acts, decision or rule of law to the contrary, the Commission shall be entitled to all the rights and remedies of such municipal corporations, person, firm or corporation, including the right to recover such damages, but no action shall be brought by the Commission until such

municipal corporation, person, firm or corporation shall have agreed with the Commission to pay any costs that may be adjudged to be paid if such proceeding or action is unsuccessful. The rights and remedies of any such municipal corporation, person, firm or corporation, shall not be hereby prejudiced.

10. The Commission shall at least annually adjust and apportion the amounts payable by municipal corporations for such power and such interest, sinking fund, line loss, and cost of operating, maintaining, repairing, renewing and insuring the line and works.

11. If at any time, any other municipal corporation, or pursuant to said Act, any railway or distributing company or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporations, parties hereto, in writing, of a time and place and hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred, and paid, and to be paid by the Corporations, parties hereto, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said line is not adequate for such supply, or if the supply of the Corporations, parties hereto, will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant other than a municipal corporation, shall be computed as part of the quantity supplied to such corporation, but such corporation shall not be liable to pay for the power so supplied, or otherwise in respect thereof. No power shall be supplied by any municipal corporation to any railway or distributing company, or any other corporation or person without the written consent of the Commission.

12. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporations and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporations and other municipal corporations, supplied by the Commission, having regard to the amounts paid by them, respectively, under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

13. Each of the Corporations agrees with the other:—

(a) To take electric power exclusively from the Commission during the continuance of this agreement, subject to the provisos above set forth in paragraph 2 (b).

(b) To co-operate, by all means in its power, at all times, with the Commission to increase the quantity of power required from the Commission,

and in all other respects to carry out the objects of this agreement and of the said Act.

14. If differences arise between the Corporations, the Commission may upon application fix a time and place to hear all representations that may be made by the parties and the Commission shall, in a summary manner, when possible, adjust such differences and such adjustment shall be final. The Commission shall have all the powers that may be conferred upon a Commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

15. This agreement shall extend to, be binding upon and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have, respectively, affixed their corporate Seals and the hands of their proper officers.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,
Commissioners.

SCHEDULE.

Column 1	2	3	4	5	6	7
Name of Municipal Corporation.	Quantity of power applied for in H.P.	Maximum price of power at Niagara Falls.	No. of volts.	Estimate maximum cost of power ready for distribution in municipality.	Estimate proportionate part of cost to construct transmission line, transformer stations and works for nominally 30,000 H.P. with total capacity of 60,000 H.P.	Estimate proportionate part of line loss and of part cost to operate, maintain, repair, renew and insure transmission line, transformer stations and works for nominally 30,000 H.P. with total capacity of 60,000 H.P.
Toronto.....	10,000	\$9.40 for power at 12,000 volts until 25,000 H.P. or more are taken, then \$10.40 for power at 60,000 volts until 25,000 H.P. or more are taken, then \$10.00 for all. If power taken at higher voltage, price to be fixed by arbitration.	Number required by each corporation.	\$18 10	\$828,080	\$38,970
London	5,009			23 50	671,089	31,578
Guelph	2,500			24 00	347,420	16,350
Stratford	1,000			27 10	173,580	8,120
St. Thomas....	1,500			26 50	244,140	11,490
Woodstock.....	1,200			23 00	155,350	7,310
Kitchener.....	1,000			24 00	138,970	6,540
Galt.....	1,200			22 00	143,920	6,773
Hespeler.....	300			26 00	63,200	2,974
St. Mary's.....	500			29 50	95,677	4,502
Preston.....	600			23 50	80,530	3,789
Waterloo	685			24 50	98,460	4,630
New Hamburg..	250			29 50	47,830	2,251
Ingersoll.....	500			24 00	69,485	3,270
Port Colborne..	150			21 00	8,256	789

SCHEDULE "B."

This Indenture made in duplicate the 15th day of April in the year of our Lord one thousand nine hundred and nineteen (1919).

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Municipal Corporation of the Town of Carleton Place, hereinafter called the "Corporation," party of the second part.

Whereas, the Corporation under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power and has passed a By-law No. 796, passed the 6th day of January, to authorize the execution of an agreement therefor;

And whereas in accordance with powers conferred by Legislature, upon the Commission by the said Act and amendments thereto, the Commission intends either to purchase, acquire or construct generating stations, hydraulic plants, lines, sub-stations and all works in connection therewith required for the purpose of supplying power hereunder, or to enter into an agreement with one or more power generating companies or individuals for a supply of power required hereunder, and to construct the necessary stations, plant, lines and equipment to transmit, transform and deliver power to the Corporation;

Now therefore this indenture witnesseth that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the parties hereto agree each with the other as follows:

1. The Commission agrees:

(a) To reserve and deliver at the earliest possible date eight hundred (800) horse power, or more, of electrical power to the Corporation.

(b) At the expiration of reasonable notice, in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard commercial apparatus and plant, and to exercise all due skill and diligence so as to secure the satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's sub-station within the Corporation's limits.

2. The Corporation agrees:

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually in twelve (12) equal monthly instalments, interest upon its proportionate part (based on the quantity of electrical energy or power taken), of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations, and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

To pay an annual sum for its proportionate part of all moneys expended by the Commission on capital account for the acquiring of the said properties and rights, purchasing of power and the cost of the said construction, so as to form in thirty (30) years a sinking fund for the retirement of securities issued by the Province of Ontario.

Also to bear its proportionate part of the line loss and pay its proportionate part of the costs to operate, maintain, repair, renew and insure the said generating plants, transformer stations, transmission lines, distributing stations, and other necessary works.

All payments under this clause shall be subject to adjustment under paragraph 6.

(c) The amounts payable in accordance with clause 2 (b) shall be paid in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month. If any bills remain unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take power exclusively from the Commission during the continuance of this agreement.

(e) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month exceeds during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or the highest average, for a period of twenty consecutive minutes, the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve, such increased quantity of power in accordance with the terms and conditions of this contract.

(f) To take and use the three-phase power at all times in such manner that the power factor, i.e., the ratio of the kilowatts to the kilovolt-

amperes is a maximum, but, in any event, the corporation shall pay for 90 per cent. of the maximum kilovolt-amperes considered as true power factor or kilowatts. The maximum in kilovolt-amperes or kilowatts shall be taken as the maximum average or integrated demand over any twenty consecutive minutes.

(g) To use at all times first-class, modern, standard commercial apparatus and plant, to be approved by the Commission and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

(h) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement, and of the said Act.

3. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for local distribution.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time, during the continuance of this agreement, to inspect the apparatus, plant, and property of the Corporation, and take records at all reasonable hours.

6. The Commission shall at least annually adjust and apportion the amount or amounts payable by the Municipal Corporation or Corporations for such power and such interest, sinking fund, cost of lost power and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations supplied by the Commission, having regard to the amounts paid by them, respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation, in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power

upon such terms and conditions as may, having regard to the risk and expense incurred and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works, or any part thereof, are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such Corporation, but such Corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company, without the written consent of the Commission, but the Corporation may sell power to any person or persons, or manufacturing companies within the limits of the Corporation, but such power shall not be sold for less than cost, neither shall there be any discrimination as regards price and quantity.

9. If differences arise between corporations to which the Commission is supplying power, the Commission may, upon application, fix a time and place and hear all representations that may be made by the parties, and the Commission shall, in a summary manner, when possible, adjust such differences, and such adjustments shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

10. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,

(Sgd.) A. BECK, *Chairman*.

(Seal)

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE TOWN OF CARLETON PLACE.

(Sgd.) R. W. BATES, *Mayor*.

(Seal)

(Sgd.) A. R. G. PEDEN, *Clerk*.

SCHEDULE "C."

This Indenture, made in duplicate the 26th day of January, in the year of our Lord, one thousand nine hundred and twenty (1920).

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Municipal Corporation of the Town of Alexandria, hereinafter called the "Corporation," party of the second part.

Whereas the Corporation, under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power and has passed a by-law No. 320, passed the first day of December, 1919, to authorize the execution of an agreement therefor,

And whereas in accordance with the powers conferred by Legislature, upon the Commission by the said Act and amendments thereto, the Commission intends either to purchase, acquire or construct generating stations, hydraulic plants, lines, sub-stations and all works in connection therewith required for the purpose of supplying power hereunder, or to enter into an agreement with one or more power generating companies or individuals for a supply of power required hereunder, and to construct the necessary stations, plant, lines and equipment to transmit, transform and deliver power to the Corporation;

Now therefore this indenture witnesseth that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the parties hereto agree each with the other as follows:

1. The Commission agrees:

(a) To reserve and deliver at the earliest possible date three hundred (300) horse power, or more, of electrical power to the Corporation.

(b) At the expiration of reasonable notice, in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard commercial apparatus and plant, and to exercise all due skill and diligence so as to secure the satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's sub-station within the Corporation's limits.

2. The Corporation agrees:

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually in twelve (12) equal monthly instalments, interest upon its proportionate part (based on the quantity of electrical energy or power taken), of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations, and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

To pay an annual sum for its proportionate part of all moneys expended by the Commission on capital account for the acquiring of the said properties and rights, purchasing of power and the cost of the said construction, so as to form in thirty (30) years a sinking fund for the retirement of securities issued by the Province of Ontario.

Also to bear its proportionate part of the line loss and pay its proportionate part of the costs to operate, maintain, repair, renew and insure the said generating plants, transformer stations, transmission lines, distributing stations, and other necessary works.

All payments under this clause shall be subject to adjustment under paragraph 6.

(c) The amounts payable in accordance with clause 2 (b) shall be paid in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month. If any bills remain unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take power exclusively from the Commission during the continuance of this agreement.

(e) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month exceeds during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or the highest average, for a period of twenty consecutive minutes, the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve, such increased quantity of power in accordance with the terms and conditions of this contract.

(f) To take and use the three-phase power at all times in such manner that the power factor, i.e., the ratio of the kilowatts to the kilovolt-amperes is a maximum, but, in any event, the corporation shall pay for

90 per cent. of the maximum kilovolt-amperes considered as true power factor or kilowatts. The maximum in kilovolt-amperes or kilowatts shall be taken as the maximum average or integrated demand over any twenty consecutive minutes.

(g) To use at all times first-class, modern, standard commercial apparatus and plant, to be approved by the Commission and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

(h) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement, and of the said Act.

3. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for local distribution.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time, during the continuance of this agreement, to inspect the apparatus, plant, and property of the Corporation, and take records at all reasonable hours.

6. The Commission shall at least annually adjust and apportion the amount or amounts payable by the Municipal Corporation or Corporations for such power and such interest, sinking fund, cost of lost power and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations supplied by the Commission, having regard to the amounts paid by them, respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation, in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power

upon such terms and conditions as may, having regard to the risk and expense incurred and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works, or any part thereof, are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such Corporation, but such Corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company, without the written consent of the Commission, but the Corporation may sell power to any person or persons, or manufacturing companies within the limits of the Corporation, but such power shall not be sold for less than cost, neither shall there be any discrimination as regards price and quantity.

9. If differences arise between corporations to which the Commission is supplying power, the Commission may, upon application, fix a time and place and hear all representations that may be made by the parties, and the Commission shall, in a summary manner, when possible, adjust such differences, and such adjustments shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

10. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO,

(Sgd.) I. B. LUCAS, *Vice-Chairman*.

(Seal)

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE VILLAGE OF ALEXANDRIA.

(Sgd.) GEO. SIMON, *Mayor*.

(Seal)

(Sgd.) S. MACDONELL, *Clerk*.

SCHEDULE "D."

This Indenture, made in duplicate the 26th day of January in the year of our Lord, one thousand nine hundred and twenty (1920).

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Municipal Corporation of the Village of Maxville, hereinafter called the "Corporation," party of the second part.

Whereas the Corporation, under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power and has passed a By-law No. 413, passed the 12th day of January to authorize the execution of an agreement therefor;

And whereas in accordance with the powers conferred by Legislature upon the Commission by the said Act and amendments thereto, the Commission intends either to purchase, acquire, or construct generating stations, hydraulic plants, lines, substations and all works in connection therewith required for the purpose of supplying power hereunder, or to enter into an agreement with one or more power generating companies or individuals for a supply of power required hereunder, and to construct the necessary stations, plant, lines and equipment to transmit, transform and deliver power to the Corporation.

Now therefore this indenture witnesseth that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the parties hereto agree each with the other as follows:

1. The Commission agrees:

(a) To reserve and deliver at the earliest possible date seventy-five (75) horse power, or more, of electrical power to the Corporation.

(b) At the expiration of reasonable notice, in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard commercial apparatus and plant, and to exercise all due skill and diligence so as to secure the satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's substation within the Corporation's limits.

2. The Corporation agrees:

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually in twelve (12) equal monthly instalments interest upon its proportionate part (based on the quantity of electrical energy or power taken) of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission line, distributing stations, and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract;

To pay an annual sum for its proportionate part of all moneys expended by the Commission on capital account for the acquiring of the said properties and rights, purchasing of power and the cost of the said construction, so as to form in thirty (30) years a sinking fund for the retirement of securities issued by the Province of Ontario;

Also to bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said generating plants, transformer stations, transmission lines, distributing stations, and other necessary works.

All payments under this clause shall be subject to adjustment under paragraph 6.

(c) The amounts payable in accordance with clause (2) (b) shall be paid in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month. If any bills remain unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes, and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take power exclusively from the Commission during the continuance of this agreement.

(e) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month exceeds during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or the highest average, for a period of twenty consecutive minutes, the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve, such increased quantity of power in accordance with the terms and conditions of this contract.

(f) To take and use the three-phase power at all times in such manner that the power factor, i.e., the ratio of the kilowatts to the kilovolt-amperes is a maximum, but, in any event, the Corporation shall pay for 90 per cent. of the maximum kilovolt-amperes considered as true power factor or

kilowatts. The maximum in kilovolt-amperes or kilowatts shall be taken as the maximum average or integrated demand over any twenty consecutive minutes.

(g) To use at all times first-class, modern, standard commercial apparatus and plant, to be approved by the Commission and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

(h) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission and in all respects to carry out the objects of this agreement and of the said Act.

3. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for local distribution.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission shall have the right from time to time during the continuance of this agreement to inspect the apparatus, plant, and property of the Corporation, and take records at all reasonable hours.

6. The Commission shall at least annually adjust and apportion the amount or amounts payable by the Municipal Corporation or Corporations for such power and such interest, sinking fund, cost of lost power and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations, supplied by the Commission, having regard to the amounts paid by them respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation, in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred, and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works, or any part thereof, are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such Corporation, but such Corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company, without the written consent of the Commission, but the Corporation may sell power to any person or persons, or manufacturing companies within the limits of the Corporation, but such power shall not be sold for less than cost, neither shall there be any discrimination as regards price and quantity.

9. If differences arise between corporations to which the Commission is supplying power, the Commission may, upon application, fix a time and place and hear all representations that may be made by the parties, and the Commission shall, in a summary manner, when possible, adjust such differences, and such adjustments shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

10. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their Corporate Seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO. "

(Sgd.) I. B. LUCAS, *Vice-Chairman*.

(Seal.)

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE VILLAGE OF MAXVILLE.

(Sgd.) A. H. ROBERTSON, *Reeve*.

(Seal.)

(Sgd.) J. W. WEEGAR, *Clerk*.

SCHEDULE "E."

This agreement made this 28th day of November, A.D. 191 .

Between

The Hydro-Electric Power Commission of Ontario, herein called the
"Commission," party of the first part,

and

The Municipal Corporation of the Township of Eldon, herein called the
"Corporation," party of the second part.

Whereas, pursuant to an Act to provide for the transmission of electrical power to municipalities, the Corporation has applied to the Commission for a supply of power;

And whereas the Corporation under the provisions of *The Power Commission Act* and amendments thereto and *The Power Commission Act of 1911*, being an Act to provide for the local distribution of electrical power, has, at the request of a number of ratepayers (petitioners) applied to the Commission for a supply of electrical power or energy, and has passed a by-law No. 495 to authorize the execution of an agreement therefor.

1. Now therefore this indenture witnesseth that in consideration of the premises and of the agreements of the Corporation set forth, subject to the provisions of the said Act and amendments, the Commission agrees with the Corporation:—

(a) To reserve and deliver at the earliest possible date electrical power to the Corporation as required by the Corporation.

(b) At the expiration of thirty (30) days' notice in writing which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electrical power as may be required from time to time.

(c) To use at all times first class, modern, standard commercial apparatus and plant, and to exercise due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Corporation.

(d) Power shall be delivered to the Corporation at approximately 2,200 or 4,000 volts, or at any other primary voltage that may be available for the Corporation's use.

(e) To supply and construct all 2,200, 4,000 or other lines at primary voltage made necessary by contracts for electric service made between the Corporation and residents or users, within the township, from the Commission's transformer station or stations to the service transformers of the Corporation, located at such points as the Commission may approve.

2. In consideration of the premises and of the covenants and agreements herein set forth, the Corporation agrees with the Commission:—

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement, so as to be able to give notice as specified in paragraph 1 (b).

(b) Subject to the provisions of paragraph 2 (g) herein, to pay to the Commission monthly, for all power taken, including the charges in connection with the delivery of the power to the municipality as outlined in clauses 2 (c) and (d).

(c) To pay annually, in twelve monthly instalments, interest upon its proportionate part of the moneys expended by the Commission on capital account for the construction of lines, transformer stations and other necessary works for the delivery of power to the Corporation; to pay an annual sum for its proportionate part of the cost of the said construction, so as to form in thirty years a sinking fund for the retirement of the securities issued by the Province of Ontario; and to bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said lines, stations and works. All payments under this paragraph shall be subject to adjustment under paragraph 7.

(d) In addition to the cost of power, and the cost of delivering it to the Corporation as provided for in paragraphs 2 (b) and (c), to pay to the Commission in half yearly instalments, interest and sinking fund on a thirty year basis on all capital invested by the Commission in 2,200, 4,000 or other lines of primary voltage as provided for in paragraph 1 (e), and to maintain, repair and operate the said lines, and set aside a fund for renewals at a rate to be fixed by the Commission, on all capital expended by the Commission on such construction.

(e) The amounts payable in accordance with clause 2 (b), (c) and (d) shall be paid in gold coin of the present standard of weight and fineness, at the office of the Commission at Toronto, and bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month except that payments under clause 2 (d) shall be made half yearly. If any bills remain unpaid for fifteen days, the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(f) To take power exclusively from the Commission during the continuance of this agreement.

(g) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month shall exceed during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or highest average, for a period of twenty consecutive minutes, the Corporation shall pay for this greater amount of power during the entire

month. The taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for and on the part of the Commission to hold in reserve an additional block of power in accordance with the terms and conditions of this contract.

When the power factor of the greatest amount of power taken for said twenty consecutive minutes falls below ninety per cent. (90%), the Corporation shall pay for ninety per cent. (90%) of the maximum kilovolt-amperes (considered as true power or kilowatts) when that amount is in excess of the maximum kilowatts taken. The maximum in kilowatts or kilovolt-amperes shall be taken as the maximum average or integrated demand over any twenty (20) consecutive minutes.

(h) To use at all times first-class, modern standard commercial apparatus and plant to be approved by the Commission and to exercise all due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Commission and of the Company.

(i) To co-operate, by all means in its power, at all times, with the Commission, to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement and of the said Act.

3. The power shall be three-phase, alternating commercially continuous twenty-four hour power every day of the year except as provided in paragraph 5, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for distribution within the municipality.

(a) That the meters with their series and potential transformers shall be connected at the point of delivery, and shall be subject to test as to accuracy by either party hereto.

(b) The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the point of delivery to the Corporation shall constitute the supply of all power involved herein and the fulfilment of all operating obligations hereunder; and when voltage and frequency are so maintained, the amount of the power, its fluctuations, load factor, power factor, distribution as to phases, and all other electric characteristics and qualities are under the sole control of the Corporation, their agents, customers, apparatus, appliances and circuits.

4. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time during the continuance of this agreement, to inspect the apparatus, plant and property of the Corporation and take records at all reasonable hours.

5. In case the Commission should at any time or times be prevented from supplying said power, or any part thereof, or in case the Corporation shall at any time be prevented from taking said power, or any part thereof, by strike, lockout, fire, invasion, explosion, act of God or the King's enemies, or any other cause reasonably beyond their control, then the Commission shall not be bound to deliver such power during such times, and the Corporation shall not be bound to pay the price of said power during such time.

6. The Commission shall at least annually adjust and apportion the amounts payable by municipal corporations for such power and such interest, sinking fund, line loss, and cost of operating, maintaining, repairing, renewing and insuring the line and works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations, supplied by the Commission, having regard to the amounts paid by them respectively, under the terms of this agreement, and such other considerations, as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation in writing, of a time and place and hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid for equal quantities of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

9. If differences arise between corporations to whom the Commission is supplying power, the Commission may upon application fix a time and place to hear all representations that may be made by the parties, and the Commission shall, in a summary manner when possible, adjust such differences and such adjustment shall be final.

The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries Concerning Public Matters*.

10. This agreement shall extend to, be binding upon and enure to the benefit of the successors and assigns of the parties hereto.

11. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power hereunder.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) A. BECK, *Chairman*,

(Seal)

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE TOWNSHIP OF ELDON.

(Sgd.) D. A. McFADDEN, *Reeve*.

(Seal)

(Sgd.) R. C. MCKAY, *Clerk*.

SCHEDULE "F."

This Agreement made this 16th day of December, A.D. 1919.

Between

The Hydro-Electric Power Commission of Ontario, herein called the "Commission," party of the first part;

and

The Municipal Corporation of the Township of Scott, herein called the "Corporation," party of the second part.

Whereas, pursuant to an Act to provide for the transmission of electrical power to municipalities, the Corporation applied to the Commission for a supply of power;

And whereas the Corporation under the provisions of *The Power Commission Act* and amendments thereto and *The Power Commission Act of 1911*, being an Act to provide for the local distribution of electrical power, has, at the request of a number of ratepayers (petitioners) applied to the Commission for a supply of electrical power or energy, and has passed a by-law No. 55, December 15th, 1919, to authorize the execution of an agreement therefor.

1. Now therefore this indenture witnesseth that in consideration of the premises and of the agreements of the Corporation set forth, subject to the provisions of said Act and amendments, the Commission agrees with the Corporation:—

(a) To reserve and deliver at the earliest possible date electrical power to the Corporation as required by the Corporation.

(b) At the expiration of thirty (30) days' notice in writing which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electrical power as may be required from time to time.

(c) To use at all times first class, modern, standard commercial apparatus and plant, and to exercise due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Corporation.

(d) Power shall be delivered to the Corporation at approximately 2,200 or 4,000 volts, or at any other primary voltage that may be available for the Corporation's use.

(e) To supply and construct all 2,200, 4,000 or other lines at primary voltage made necessary by contracts for electrical service made between the Corporation and residents or users, within the township, from the Commission's transformer station or stations to the service transformers of the Corporation, located at such points as the Commission may approve.

2. In consideration of the premises and of the covenants and agreements herein set forth, the Corporation agrees with the Commission:—

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement, so as to be able to give notice as specified in paragraph 1 (b).

(b) Subject to the provisions of paragraph 2 (g) herein, to pay to the Commission monthly, for all power taken, including the charges in connection with the delivery of the power to the municipality as outlined in clauses 2 (c) and (d).

(c) To pay annually, in twelve monthly instalments, interest upon its proportionate part of the moneys expended by the Commission on capital account for the construction of lines, transformer stations and other necessary works for the delivery of power to the Corporation; to pay an annual sum for its proportionate part of the cost of the said construction, so as to form in thirty years a sinking fund for the retirement of the securities issued by the Province of Ontario; and to bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said lines, stations and works. All payments under this paragraph shall be subject to adjustment under paragraph 7.

(d) In addition to the cost of power, and the cost of delivering it to the Corporation as provided for in paragraphs 2 (b) and (c), to pay to the Commission in half yearly instalments, interest and sinking fund on a thirty year basis on all capital invested by the Commission in 2,200, 4,000 or other lines of primary voltage as provided for in paragraph 1 (e), and to maintain, repair and operate the said lines, and set aside a fund for renewals at a rate to be fixed by the Commission, on all capital expended by the Commission on such construction.

(e) The amounts payable in accordance with clause 2 (b), (c) and (d) shall be paid in gold coin of the present standard of weight and fineness, at the office of the Commission at Toronto, and bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month except that payments under clause 2 (d) shall be made half yearly. If any bill remain unpaid for fifteen days, the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(f) To take power exclusively from the Commission during the continuance of this agreement.

(g) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month shall exceed during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or highest average, for a period of twenty consecutive minutes, the Corporation shall pay for this greater amount of power during the entire

month. The taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for and on the part of the Commission to hold in reserve an additional block of power in accordance with the terms and conditions of this contract.

When the power factor of the greatest amount of power taken for said twenty consecutive minutes falls below ninety per cent. (90%), the Corporation shall pay for ninety per cent. (90%) of the maximum kilovolt-amperes (considered as true power or kilowatts) when that amount is in excess of the maximum kilowatts taken. The maximum in kilowatts or kilovolt-amperes shall be taken as the maximum average or integrated demand over any twenty (20) consecutive minutes.

(h) To use at all times first-class, modern standard commercial apparatus and plant to be approved by the Commission and to exercise all due skill and diligence so as to secure the most perfect operation of the plant and apparatus of the Commission and of the Company.

(i) To co-operate, by all means in its power, at all times, with the Commission, to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement and of the said Act.

3. The power shall be three-phase, alternating commercially continuous twenty-four hour power every day of the year except as provided in paragraph 5, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for distribution within the municipality.

(a) That the meters with their series and potential transformers shall be connected at the point of delivery, and shall be subject to test as to accuracy by either party hereto.

(b) The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the point of delivery to the Corporation shall constitute the supply of all power involved herein and the fulfilment of all operating obligations hereunder; and when voltage and frequency are so maintained, the amount of the power, its fluctuations, load factor, distribution as to phases, and all other electric characteristics and qualities are under the sole control of the Corporation, their agents, customers, apparatus, appliances and circuits.

4. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time during the continuance of this agreement, to inspect the apparatus, plant and property of the Corporation and take records at all reasonable hours.

5. In case the Commission should at any time or times be prevented from supplying said power, or any part thereof, or in case the Corporation shall at any time be prevented from taking said power, or any part thereof, by strike, lockout, fire, invasion, explosion, act of God or the King's enemies, or any other cause reasonably beyond their control, then the Commission shall not be bound to deliver such power during such times, and the Corporation shall not be bound to pay the price of said power during such time.

6. The Commission shall at least annually adjust and apportion the amounts payable by municipal corporations for such power and such interest, sinking fund, line loss, and cost of operating, maintaining, repairing, renewing and insuring the line and works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations, supplied by the Commission, having regard to the amounts paid by them respectively, under the terms of this agreement, and such other considerations, as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation in writing, of a time and place and hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid for equal quantities of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

9. If differences arise between corporations to whom the Commission is supplying power, the Commission may upon application fix a time and place to hear all representations that may be made by the parties, and the Commission shall, in a summary manner when possible, adjust such differences and such adjustment shall be final.

The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries Concerning Public Matters*.

10. This agreement shall extend to, be binding upon and enure to the benefit of the successors and assigns of the parties hereto.

11. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power hereunder.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

I. B. LUCAS, *Vice-Chairman*.

(SEAL)

W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE TOWNSHIP OF SCOTT.

ALEXANDER NOBLE, *Reeve*.

(SEAL)

WM. B. WEBSTER, *Clerk*.

THE TOWNSHIP OF SCOTT.

BY-LAW No. 55.

A by-law authorizing the execution of an agreement with the Hydro-Electric Power Commission of Ontario to furnish to the township electric power.

Whereas a petition for power has been received from Mr. Jacob R. Meyers, lot number 23, concession three and others of this Township of Scott.

Therefore the reeve and clerk are hereby authorized to execute agreement between this Township of Scott and the Hydro-Electric Power Commission of the Province of Ontario for power for those and other petitioners who may apply for power.

Passed in open council this fifteenth day of December, A.D. 1919.

ALEXANDER NOBLE, *Reeve*.

(SEAL.)

WM. B. WEBSTER, *Clerk*.

SCHEDULE "G."

This indenture made in duplicate the tenth day of June, in the year of our Lord, nineteen hundred and nineteen.

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Board of Water Commissioners of the Municipal Corporation of the Town of Lindsay, hereinafter called the "Customer," party of the second part.

Whereas the Commission acting under *The Power Commission Act*, R.S.O., 1914, chapter 34, has available sufficient electrical power or energy for the purpose of this agreement;

And whereas the Customer has applied to the Commission for a supply of electrical power or energy;

And whereas the Customer is operating a pumping station in the Town of Lindsay, Province of Ontario, with head office at Lindsay, Ontario;

Now therefore this indenture witnesseth that in consideration of the premises and of the agreements of the parties hereto each agrees with the other as follows:—

1. The Commission agrees:

(a) To reserve for and deliver to the Customer one hundred (100) horsepower of electrical power or energy at the point of delivery, hereinafter specified, beginning on the first day of June, 1918, and extending for the period of this agreement.

(b) To reserve for and deliver to the Customer additional horsepower in blocks of twenty-five (25) h.p. each, after the expiration of sixty days' notice in writing, up to a maximum of two hundred (200) h.p.

(c) To use at all times first class, modern standard commercial apparatus and plant and to exercise all due skill and diligence so that the service rendered to the Customer hereunder shall be satisfactory.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year, except as provided for herein, at the point of delivery, herein defined as the primary terminals of the Customer's transformers in Lindsay, Ontario.

2. The Customer agrees:

(a) To use all diligence by every lawful means in his power to prepare for the receipt and use of the power covered by this agreement, so as to be able to receive power on the date herein set forth.

(b) To pay to the Commission for all power used or held in reserve in monthly payments in gold coin at Lindsay under the following schedule or rate:—

Service charges:—

Ninety cents (90c.) per month per h.p. of maximum demand;
plus

Consumption charges of:—

Two and one-tenth cents (2.1c.) per kilowatt hour (E.W.H.) for all consumption up to the first 50 hours' monthly use of maximum demand;

One and four-tenth cents (1.4c.) per K.W.H. for the next 50 hours' monthly use of maximum demand;

and each month's service charge to be computed as though the maximum amount taken during that month had been taken for the whole month, save that paragraph (d) hereof shall govern the minimum and that this paragraph shall be subject to the stipulations of clauses 5 (b) and (d).

The amount of power taken or held in reserve under this agreement shall be taken as the maximum average amount of power taken for any ten consecutive minutes (the 10 minute integrated demand) as shown by meter.

From the gross bill, computed as above, will be allowed the following discount:—

A "prompt payment" discount of ten per cent. (10%) if the bill is paid by the date set forth hereunder.

(c) To take power exclusively from the Commission of the terms of this agreement, and not to sell or dispose of said power, or any part thereof, directly or indirectly, without the written consent of the Commission.

(d) If the customer during any month takes more than the amount of power ordered and held in reserve for him for ten (10) consecutive minutes the taking of such excess power shall thereafter constitute an obligation on the part of the Customer to pay service charge for, and on the part of the Commission to hold in reserve such increased quantity of power in accord-

ance with the terms and conditions of this agreement, as long as this greater amount does not exceed the maximum hereunder, provided that all power used in excess of the amount held in reserve if used for fire purposes shall be paid for during the month in which it is used but shall not be considered as establishing a new maximum demand to govern future minimum payments.

(e) At all times to take and use the three-phase power in such a manner that the current will be taken equally from the three phases and in no case shall the difference between any two phases be greater than ten per cent. (10%).

(f) At all times so to take and use the three-phase power that the ratio of the kilowatts to the kilovolt-amperes is a maximum, but in any event the Customer shall pay for at least ninety per cent. (90%) of the maximum kilovolt-amperes considered as true power or kilowatts. The maximum demand in kilovolt-amperes or kilowatts shall be taken as the maximum average or integrated demand over any ten consecutive minutes.

One horsepower is defined as 0.746 kilowatts.

One kilowatt is defined as the product of the instantaneous current, voltage and power factor of the load as shown by a standard polyphase wattmeter and divided by 1,000.

One kilovolt-ampere is defined as the product of the simultaneous average current per phase times the average voltage between phases, times 1,732 and divided by 1,000.

For the purpose of this agreement, the kilovolt-amperes may be determined either directly by current and voltage measurements or by the power factor as may be approved by the Commission.

The power factor is defined as the kilowatts divided by kilovolt-amperes.

(g) Bills shall be rendered by the Commission to the Customer on or before the fifth day, and paid by the Customer on or before the fifteenth day of each calendar month.

If any bill remains unpaid for thirty (30) days after the date thereof the Commission may, in addition to all other remedies, and without notice, discontinue the supply of power to the Customer until the said bill is paid and no such discontinuance by the Commission shall relieve the Customer from the performance of the covenants, provisos and conditions herein contained.

All payments in arrears shall bear interest at the legal rate.

(h) To use at all times modern, standard commercial apparatus and plant to be approved by the Commission from time to time and so to operate and conduct the plant and apparatus as to cause minimum disturbance or fluctuations to the Commission's supply and to exercise all due skill and diligence so as to secure the satisfactory operation of the plant and apparatus of both the Commission and the Customer.

(i) Should it be expedient or necessary for the Commission in order to deliver power hereunder, to construct, install or build poles, lines, cables, transformers, switches or other appliances or devices on, over or through the property of the Customer, or on, over or through any other adjoining property, the Customer hereby agrees to supply and arrange for such necessary rights-of-way, free of costs and satisfactory to the Commission for the life of this agreement or renewals thereof, and for thirty (30) days thereafter, so that the Commission may build, erect, construct, operate, repair, maintain and remove any of said apparatus or devices belonging to the Commission.

(j) The Customer shall erect a substation approved by the Commission and shall supply, install and operate the electrical equipment therein as instructed by the Commission.

3. The power delivered hereunder shall be alternating three phase having a periodicity of approximately four thousand volts between phase wires, subject to normal variations in both frequency and voltage not to exceed five per cent. (5%).

4.—(a) Measurement of the power held in reserve or taken by the Customer hereunder shall be made by means of a standard polyphase integrated demand watthour meter, and other meters as required, so arranged as to accurately measure and record the power taken by the customer.

(b) The point of measuring the power covered by this agreement shall be as near as possible to the point of delivery, and the instruments, with the necessary current and potential transformers for the measurement of power hereunder shall be provided, installed and maintained correct by the Commission.

Records from said meters shall be on file with the Commission and shall be available to the Customer for inspection at all reasonable times.

(c) Whenever the said measuring instruments are connected at other than the point of delivery their reading shall be subject to a correction and shall be corrected to give a reading such as would be obtained by instruments connected at the point of delivery. Such correction shall be based upon tests or calculations by the Commission.

(d) Should the point of measurement be located on the premises of the Customer no rental charge shall be made to the Commission for the location of said instruments, transformers or other equipment on the Customer's premises.

(e) Access to said instruments and transformers belonging to the Commission shall be free to the Commission at any and all times and the Commission may test, calibrate or remove said measuring instruments and transformers at any reasonable time, but when possible the customer shall be advised at least seven days in advance of the Commission's intention to re-calibrate, remove or change the measuring instruments.

(f) The Customer shall have the right to test any such measuring instrument in the presence of a representative of the Commission by giving to the Commission seven days' previous notice in writing of its desire to test such measuring instruments.

(g) The Commission shall repair or replace and re-test defective meters or measuring equipment within a reasonable time, but during the time there is no meter in service, it shall be assumed that the power consumed is the same as for other days of the same month on which a similar load existed.

(h) The Customer shall be responsible for any damage to the property or apparatus furnished by the Commission for the purpose of supplying or measuring power hereunder and installed on the Customer's property, providing such damage originates from a source external to the said apparatus of the Commission, and is not due to defect in the apparatus of the Commission.

5 (a) The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the point of delivery shall constitute the supply of power involved herein and a fulfilment of all the operating obligations hereunder, and when the voltage and the frequency are so maintained the amount of power, its fluctuations, load factor, power factor, distribution as to phases, and all other characteristics and qualities are under the sole control of the Customer, his agents, apparatus, appliances and circuits.

(b) In case the Commission shall at any time or times be prevented from delivering said power or any part thereof by strikes, lockouts, riot, fire, invasion, explosion, act of God, the King's enemies, or any other cause or causes reasonably beyond its control, then the Commission shall not be bound to deliver such power during such time and the Customer shall not be bound to pay for such power during such time.

(c) The Commission shall be prompt and diligent in removing the cause of such interruption, and as soon as the cause of such interruption is removed the Commission shall, without delay, deliver the said power as aforesaid, and the Customer shall take and use the same.

(d) It is further agreed hereby that the Commission shall have the right at reasonable times, and when possible after due notice has been given to the Customer to discontinue the supply of power to the Customer for the purpose of safeguarding life or property, or for the purpose of making repairs, renewals or replacements to the lines or apparatus of the Commission, but all such interruptions shall be of a minimum duration and when possible arranged for a time least objectionable to the Customer.

Such interruptions shall not release the Customer from his obligations to pay for or resume the use of power when service is restored.

6. A representative or engineer of the Commission appointed for this purpose, may, at any reasonable time during the continuance of this agreement, have access to the premises of the Customer for the purpose of inspecting the electrical apparatus, plant or property of the Customer and to take records therefrom as required.

7. It is mutually agreed:—

That in case of any dispute arising between the parties hereto relative to the fulfilment of any of the terms, provisos or conditions of this agreement, or as to the method or accuracy of the measurement of power, or any

other question which may arise under this agreement, the same shall be promptly referred to arbitration under *The Arbitration Act*, and the finding of said arbitration or arbitrators shall be final and binding upon both parties hereto.

8. This agreement shall be binding upon both parties hereto for a period of five (5) years, beginning on the day and date when power is first taken hereunder, and this agreement will be considered as being automatically renewed from year to year thereafter, unless notice of cancellation is given by either party hereto to the other one month before the expiration of the first period or any succeeding yearly period.

9. The Commission shall be entitled at the termination of this agreement, or any extension thereof, or within thirty (30) days thereafter, to remove from the Customer's premises any and all plant or equipment which may have been installed by the Commission for the supply or measurement of power hereunder.

10. This agreement shall extend to, and be binding upon and enure to the benefit of the successors and assigns of the parties hereto respectively.

In witness whereof the parties hereto have affixed their seals and the hands of their proper officers.

THE HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Seal.)

A. BECK.
W. W. POPE, *Secretary*.

Witnesses:

.....
.....

THE BOARD OF WATER COMMISSIONERS OF THE
MUNICIPAL CORPORATION OF THE TOWN OF
LINDSAY.

(Seal.)

T. J. BRADY.
D. RAY.

O. W. YOUNG.

Approved:

.....
District Manager.

SCHEDULE "H."

This Indenture made in duplicate the 10th day of February, in the year of our Lord, one thousand nine hundred and twenty (1920).

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Municipal Corporation of the Village of Lancaster, hereinafter called the "Corporation," party of the second part.

Whereas the Corporation, under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power and has passed a by-law No. 389, passed the 3rd day of December, 1919, to authorize the execution of an agreement therefor;

And whereas in accordance with the powers conferred by Legislature upon the Commission by the said Act and amendments thereto, the Commission intends to purchase, acquire or construct generating stations, hydraulic plants, lines, sub-stations, and all works in connection therewith required for the purposes of supplying power hereunder, or to enter into an agreement with one or more power generating companies or individuals for a supply of power required hereunder, and to construct the necessary stations, plant, lines and equipment to transmit, transform and deliver power to the Corporation;

Now therefore this Indenture witnesseth that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the parties hereto agree each with the other as follows:

1. The Commission agrees:

(a) To reserve and deliver at the earliest possible date fifty (50) horse power, or more, of electrical power to the Corporation.

(b) At the expiration of reasonable notice, in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard commercial apparatus and plant, and to exercise all due skill and diligence so as to secure the satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's sub-station within the Corporation's limits.

2. The Corporation agrees:

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually in twelve (12) equal monthly instalments, interest upon its proportionate part (based on the quantity of electrical energy or power taken) of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations, and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

To pay an annual sum for its proportionate part of all moneys expended by the Commission on capital account for the said properties and rights, purchasing of power and the cost of the said construction, so as to form in thirty (30) years a sinking fund for the retirement of securities issued by the Province of Ontario.

Also to bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said generating plants, transformer stations, transmission lines, distributing stations, and other necessary works.

All payments under this clause shall be subject to adjustment under paragraph 6.

(c) The amounts payable in accordance with clause 2 (b) shall be paid in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month. If any bills remain unpaid for fifteen days, the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take power exclusively from the Commission during the continuance of this agreement.

(e) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month exceeds during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or the highest average, for a period of twenty consecutive minutes, the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve, such increased quantity of power in accordance with the terms and conditions of this contract.

(f) To take and use the three-phase power at all times in such manner that the power factor, i.e., the ratio of the kilowatts to the kilovolt-amperes is a maximum, but, in any event the corporation shall pay for 90 per cent. of the maximum kilovolt-amperes considered as true power factor or

kilowatts. The maximum in kilo-volt-amperes or kilowatts shall be taken as the maximum average or integrated demand over any twenty consecutive minutes.

(g) To use at all times first-class, modern, standard commercial apparatus and plant, to be approved by the Commission and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

(h) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement, and of the said Act.

3. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for local distribution.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time, during the continuance of this agreement, to inspect the apparatus, plant, and property of the Corporation, and take records at all reasonable hours.

6. The Commission shall at least annually adjust and apportion the amount or amounts payable by the Municipal Corporation or Corporations for such power and such interest, sinking fund, cost of lost power and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the Corporation and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and other municipal corporations, supplied by the Commission, having regard to the amounts paid by them, respectively, under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the Corporation, in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred, and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works, or any part thereof, are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such Corporation, but such Corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company, without the written consent of the Commission, but the Corporation may sell power to any person or persons, or manufacturing companies within the limits of the Corporation, but such power shall not be sold for less than cost, neither shall there be any discrimination as regards price and quantity.

9. If differences arise between corporations to which the Commission is supplying power, the Commission may, upon application, fix a time and place and hear all representations that may be made by the parties, and the Commission shall, in a summary manner, when possible, adjust such differences, and such adjustment shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

10. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) I. B. LUCAS, *Vice-Chairman*.

(Seal.)

(Sgd.) W. W. POPE, *Secretary*.

THE MUNICIPAL CORPORATION OF THE VILLAGE OF LANCASTER.

(Sgd.) R. T. NICHOLSON, *Reeve*.

(Seal.)

(Sgd.) E. I. SLUNNETT, *Clerk*.

SCHEDULE "I."

Municipality.	Quantity of power applied for in H.P.
Lakefield	200
Havelock	200
Norwood	200

(Copy of Lakefield agreement follows here.)

This Indenture, made in duplicate the 14th day of Ferbruary, in the year of our Lord, one thousand nine hundred and twenty.

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Municipal Corporation of the Village of Lakefield, hereinafter called the "Corporation," party of the second part.

Whereas the Corporation, under the provisions of *The Power Commission Act* and amendments thereto, Revised Statutes of Ontario, Chapter 39, has applied to the Commission for a supply of power and has passed a By-law No. 565, passed the 8th day of December, 1919, to authorize the execution of an agreement therefor.

Now therefore this indenture witnesseth, that in consideration of the premises and of the agreements of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the parties hereto agree each with the other as follows:

1. The Commission agrees:

(a) To reserve and deliver at the earliest possible date, two hundred (200) horse power, or more of electrical power to the Corporation.

(b) At the expiration of reasonable notice, in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard commercial apparatus and plant, and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's substation within the Corporation's limits.

2. The Corporation agrees:

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually in twelve (12) equal monthly instalments, interest upon its proportionate part (based on the quantity of electrical energy or power taken) of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations, and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

To pay an annual sum for its proportionate part of all moneys expended by the Commission on capital account for the acquiring of the said properties and rights, and the cost of the said construction, so as to form in thirty (30) years a sinking fund for the retirement of securities issued by the Province of Ontario.

Also to bear its proportionate part of the line loss and pay its proportionate part of the cost to operate, maintain, repair, renew and insure the said generating plants, transformer stations, transmission lines, distributing stations, and other necessary works.

All payments under this clause shall be subject to adjustment under paragraph six.

(c) The amounts payable in accordance with clause 2 (b) shall be paid in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the 5th day and paid by the Corporation on or before the 15th day of each month. If any bills remain unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrear shall bear interest at the legal rate.

(d) To take electric power exclusively from the Commission during the continuance of this agreement.

(e) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month exceeds the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or the highest average, for a period of twenty consecutive minutes, the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve, such increased quantity of power in accordance with the terms and conditions of this contract.

When the power factor of the highest average amount of power taken for said twenty consecutive minutes falls below 90 per cent., the corporation shall pay for 90 per cent. of the kilovolt amperes provided that said ninety per cent. (90%) of said kilovolt amperes is greater than the maximum kilowatts for any twenty (20) minute period during the month.

(f) To use at all times first-class, modern, standard commercial apparatus and plant, to be approved by the Commission, and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

(g) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission, and in all other respects to carry out the objects of this agreement, and of the said Act.

3. This agreement shall remain in force for thirty (30) years from the date of the first delivery of power under this contract.

4. The power shall be alternating, three phase having a periodicity of approximately 60 cycles per second, and shall be delivered as aforesaid at a voltage suitable for local distribution.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time, during the continuance of this agreement, to inspect the apparatus, plant and property of the Corporation, and take records at all reasonable hours.

6. The Commission shall at least annually adjust and apportion the amount or amounts payable by the municipal corporation or corporations for such power and such interest, sinking fund, cost of lost power and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the corporations and other municipal corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the corporations and other municipal corporations supplied by the Commission, having regard to the amounts paid by them, respectively, under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the corporation, in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantity of power, the Commission may supply power upon such terms and conditions as may, having regard to the risk and expense incurred and paid, and to be paid by the Corporation, appear equitable to the Commission, and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works, or any part thereof, are not adequate for such supply, or if the supply of the Corporation

will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time of such application, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such corporation, but such corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company, without the written consent of the Commission, but the corporation may sell power to any person or persons, or manufacturing companies within the limits of the corporation, but such power shall not be sold for less than cost; neither shall there be any discrimination as regards price and quantity.

9. If differences arise between corporations to which the Commission is supplying power, the Commission may, upon application, fix a time and place to hear all representations that may be made by the parties, and the Commission shall, in a summary manner, when possible, adjust such differences and such adjustment shall be final. The Commission shall have all the powers that may be conferred upon a commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

10. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) I. B. LUCAS, *Vice-Chairman*.

(Seal.)

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE VILLAGE OF LAKEFIELD.

(Sgd.) J. C. STRICKLAND, *Reeve*.

(Seal.)

(Sgd.) W. SHERIN, *Clerk*.

SCHEDULE "J."

Municipality.	Quantity of Power Applied for in H.P.
Uxbridge	125
Kirkfield	30
Port Perry	125

(Here follows copy of Uxbridge agreement.)

This Indenture made in duplicate the 3rd day of March, in the year of our Lord one thousand nine hundred and twenty.

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Town of Uxbridge, located in Ontario County, Ontario, hereinafter called the "Corporation," party of the second part.

Whereas, pursuant to an Act to provide for the transmission of electrical power to municipalities, known as *The Power Commission Act* and amendments thereto, the Corporation applied to the Commission for a supply of power, and the Commission furnished the Corporation with estimates of the total cost of such power, ready for distribution within the limits of the Corporation (and the electors of the Corporation consented to the By-law No. 721, authorizing the Corporation to enter into a contract with the Commission for such power).

1. Now therefore this indenture witnesseth, that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the Commission agree with the Corporation:

(a) To reserve and deliver at the earliest possible date one hundred and twenty-five horse power (125 h.p.) or more of electrical power to the Corporation.

(b) At the expiration of reasonable notice in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electric power when called for.

(c) To use at all times first-class, modern, standard, commercial apparatus and plant, and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuous twenty-four (24) hour power every day in the year to the Corporation at the distribution bus bars in the Commission's sub-station within the Corporation's limits.

2. In consideration of the premises and of the agreements herein set forth, the Corporation agrees with the Commission.

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually, interest at rate payable by the Commission upon the Corporation's proportionate part (based on the quantity of electrical energy or power taken), of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

Also to pay an annual sinking fund instalment of such amount as to form at the end of thirty (30) years, with accrued interest, a sinking fund sufficient to repay the Corporation's proportionate part, based as aforesaid, of all moneys advanced by the Province of Ontario for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations and other work necessary for the delivery of said electrical energy or power, delivered to the Corporation under the terms of this contract. Also to pay the Corporation's proportionate part, based as aforesaid, of the cost of lost power and of the cost of operating, maintaining, repairing, renewing and insuring said generating plants, transformer stations, transmission lines, distributing stations and other necessary works; subject to adjustment under clause 6 of this agreement.

(c) The amounts payable under this contract shall be paid in twelve monthly payments, in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the fifth day and paid by the Corporation on or before the fifteenth day of each month. If any bill remains unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take electrical power exclusively from the Commission during the continuance of this agreement.

(e) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission and in all other respects to carry out the object of this agreement and of the said Act.

(f) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty (20) consecutive minutes during any month shall exceed during the twenty (20) consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

(g) If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated

peak, or highest average, for a period of twenty (20) consecutive minutes the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve such increased quantity of power in accordance with the terms and conditions of this contract.

(h) When the power factor of the highest average amount of power taken for said twenty (20) consecutive minutes falls below ninety per cent. (90%) the Corporation shall pay for ninety per cent. (90%) of said kilovolt-amperes, providing that said ninety (90%) of said kilovolt-amperes is greater than the maximum kilowatts for any twenty (20) minute period during the month.

(i) To use at all times first-class, modern, standard, commercial apparatus and plant, to be approved by the Commission.

(f) To exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

3. This agreement shall remain in force for thirty (30) years from date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately sixty (60) cycles per second and shall be delivered at a voltage suitable for local distribution.

(a) The meters with their series and potential transformers shall be connected at the point of delivery.

(b) The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the substation in the limits of the Corporation shall constitute the supply of all power involved herein and the fulfilment of all operating obligations hereunder, and when voltage and frequency are so maintained, the amount of power, its fluctuations, load factor, power factor, distribution as to phases and all other electric characteristics and qualities are under the sole control of the Corporation, their agents, customers, apparatus, appliances and circuits.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time during the continuance of this agreement to inspect the apparatus, plant and property of the Corporation and take records at all reasonable hours.

6. The Commission shall, at least annually adjust and apportion the amount or amounts payable by the municipal corporation or corporations for such power and such interest, sinking fund, cost of lost power, and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the involved corporation or corporations in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power upon such terms and conditions, as may, having regard to the risk and expense incurred, and paid, and to be paid by the Corporation, appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works or any part thereof are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time such application is made, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such corporation, but such corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company without the written consent of the Commission. Power shall not be sold for less than the cost and there shall be no discrimination as regards price and quantity.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the corporation or corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and any other (if any) supplied by the Commission, having regard to the amounts paid by them respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If differences arise between corporations to which the Commission is supplying power, the Commission may upon application fix a time and place and hear all representations that may be made by the parties, and the Commission shall in a summary manner, when possible, adjust such differences and such adjustment shall be final. The Commission shall have all the powers that may be conferred upon a Commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

9. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) A. BECK, *Chairman*.

(Seal).

(Sgd.) W. W. POPE, *Secretary*.

THE TOWN OF UXBRIDGE.

(Sgd.) J. W. GOULD, *Mayor*.

(Seal).

(Sgd.) W. H. CROSBY, *Clerk*.

SCHEDULE "K."

Municipality.	Quantity of Power Applied for in H.P.
Wingham	400
Kincardine	350
Lucknow	100
Teeswater	150
Priceville	25
Ripley	100

(Here follows copy of Wingham agreement.)

This Indenture made in duplicate the 20th day of February, in the year of our Lord, 1920,

Between

The Hydro-Electric Power Commission of Ontario, hereinafter called the "Commission," party of the first part,

and

The Town of Wingham, located in Huron County, Ontario, hereinafter called the "Corporation," party of the second part.

Whereas, pursuant to an Act to provide for the transmission of electrical power to municipalities, known as *The Power Commission Act* and amendments thereto, the Corporation applied to the Commission for a supply of power, and the Commission furnished the Corporation with estimates of the total cost of such power, ready for distribution within the limits of the Corporation (and the electors of the Corporation consented to the By-law Number 817, authorizing the Corporation to enter into a contract with the Commission for such power).

1. Now therefore this indenture witnesseth, that in consideration of the premises and of the agreement of the Corporation herein set forth, subject to the provisions of the said Act and amendments thereto, the Commission agrees with the Corporation:

(a) To reserve and deliver at the earliest possible date four hundred horse power (400 h.p.) or more of electrical power to the Corporation.

(b) At the expiration of reasonable notice in writing, which may be given by the Corporation from time to time during the continuance of this agreement, to reserve and deliver to the Corporation additional electrical power when called for.

(c) To use at all times first-class, modern, standard, commercial apparatus and plant, and to exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Corporation.

(d) To deliver commercially continuously 24-hour power every day in the year to the Corporation at the distribution bus bars in the Commission's sub-station within the Corporation's limits.

2. In consideration of the premises and of the agreements herein set forth, the Corporation agrees with the Commission.

(a) To use all diligence by every lawful means in its power to prepare for the receipt and use of the power dealt with by this agreement so as to be able to receive power when the Commission is ready to deliver same.

(b) To pay annually, interest at rate payable by the Commission upon the Corporation's proportionate part (based on the quantity of electrical energy or power taken), of all moneys expended by the Commission on capital account for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations and other works necessary for the delivery of said electrical energy or power to the Corporation under the terms of this contract.

Also to pay an annual sinking fund instalment of such amount as to form at the end of thirty years with accrued interest, a sinking fund sufficient to repay the Corporation's proportionate part, based as aforesaid, of all moneys advanced by the Province of Ontario for the acquiring of properties and rights, the acquiring and construction of generating plants, transformer stations, transmission lines, distributing stations and other work necessary for the delivery of said electrical energy or power, delivered to the Corporation under the terms of this contract. Also to pay the Corporation's proportionate part, based as aforesaid, of the cost of lost power and of the cost of operating, maintaining, repairing, renewing and insuring said generating plants, transformer stations, transmission lines, distributing stations and other necessary works; subject to adjustment under clause 6 of this agreement.

(c) The amounts payable under this contract shall be paid in twelve monthly payments, in gold coin of the present standard of weight and fineness, at the offices of the Commission at Toronto. Bills shall be rendered by the Commission on or before the fifth day and paid by the Corporation on or before the fifteenth day of each month. If any bill remains unpaid for fifteen days the Commission may, in addition to all other remedies and without notice, discontinue the supply of power to the Corporation until said bill is paid. No such discontinuance shall relieve the Corporation from the performance of the covenants, provisoes and conditions herein contained. All payments in arrears shall bear interest at the legal rate.

(d) To take electrical power exclusively from the Commission during the continuance of this agreement.

(e) To co-operate by all means in its power at all times with the Commission to increase the quantity of power required from the Commission and in all other respects to carry out the object of this agreement and of the said Act.

(f) To pay for three-fourths of the power ordered from time to time by the Corporation and held in reserve for it as herein provided, whether it takes the same or not. When the highest average amount of power taken for any twenty consecutive minutes during any month shall exceed during the twenty consecutive minutes three-fourths of the amount ordered by the Corporation and held in reserve, then the Corporation shall pay for this greater amount during the entire month.

(g) If the Corporation during any month takes more than the amount of power ordered and held in reserve for it, as determined by an integrated peak, or highest average, for a period of twenty consecutive minutes.

the taking of such excess shall thereafter constitute an obligation on the part of the Corporation to pay for, and on the part of the Commission to hold in reserve such increased quantity of power in accordance with the terms and conditions of this contract.

(h) When the power factor at any time falls below ninety per cent. (90%) the Corporation shall pay for ninety per cent. (90%) of the kilovolt-amperes, providing that the said ninety per cent. (90%) of said kilovolt-amperes is greater than the maximum kilowatts for any twenty (20) minute period during the month.

(i) To use at all times first-class, modern, standard, commercial apparatus and plant, to be approved by the Commission.

(j) To exercise all due skill and diligence so as to secure satisfactory operation of the plant and apparatus of the Commission and of the Corporation.

3. This agreement shall remain in force for thirty (30) years from date of the first delivery of power under this contract.

4. The power shall be alternating, three-phase, having a periodicity of approximately sixty (60) cycles per second and shall be delivered as aforesaid at a voltage suitable for local distribution.

(a) The meters with their series and potential transformers shall be connected at the point of delivery.

(b) The maintenance by the Commission of approximately the agreed voltage at approximately the agreed frequency at the substation in the limits of the Corporation shall constitute the supply of all power involved herein and the fulfilment of all operating obligations hereunder, and when voltage and frequency are so maintained, the amount of power, its fluctuations, load factor, power factor, distribution as to phases and all other electric characteristics and qualities are under the sole control of the Corporation, their agents, customers, apparatus, appliances and circuits.

5. The engineers of the Commission, or one or more of them, or any other person or persons appointed for this purpose by the Commission, shall have the right from time to time during the continuance of this agreement to inspect the apparatus, plant and property of the Corporation and take records at all reasonable hours.

6. The Commission shall, at least annually adjust and apportion the amount or amounts payable by the municipal corporation or corporations for such power and such interest, sinking fund, cost of lost power, and cost of generating, operating, maintaining, repairing, renewing and insuring said works.

If at any time any other municipal corporation, or pursuant to said Act, any railway or distributing company, or any other corporation or person, applies to the Commission for a supply of power, the Commission shall notify the applicant and the involved corporation or corporations in writing, of a time and place to hear all representations that may be made as to the terms and conditions for such supply.

Without discrimination in favour of the applicants as to the price to be paid, for equal quantities of power, the Commission may supply power upon

such terms and conditions, as may, having regard to the risk and expense incurred, and paid, and to be paid by the Corporation, appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

No such application shall be granted if the said works or any part thereof are not adequate for such supply, or if the supply of the Corporation will be thereby injuriously affected, and no power shall be supplied within the limits of a municipal corporation taking power from the Commission at the time such application is made, without the written consent of such Corporation.

In determining the quantity of power supplied to a municipal corporation, the quantity supplied by the Commission within the limits of the Corporation to any applicant, other than a municipal corporation, shall be computed as part of the quantity supplied to such corporation, but such corporation shall not be liable for payment for any portion of the power so supplied. No power shall be supplied by the municipal corporation to any railway or distributing company without the written consent of the Commission. Power shall not be sold for less than the cost and there shall be no discrimination as regards price and quantity.

7. It is hereby declared that the Commission is to be a trustee of all property held by the Commission under this agreement for the corporation or corporations supplied by the Commission, but the Commission shall be entitled to a lien upon said property for all moneys expended by the Commission under this agreement and not repaid. At the expiration of this agreement the Commission shall determine and adjust the rights of the Corporation and any other (if any) supplied by the Commission, having regard to the amounts paid by them respectively under the terms of this agreement, and such other considerations as may appear equitable to the Commission and are approved by the Lieutenant-Governor in Council.

8. If differences arise between corporations to which the Commission is supplying power, the Commission may upon application fix a time and place and hear all representations that may be made by the parties, and the Commission shall in a summary manner, when possible, adjust such differences and such adjustment shall be final. The Commission shall have all the powers that may be conferred upon a Commissioner appointed under *The Act respecting Enquiries concerning Public Matters*.

9. This agreement shall extend to, be binding upon, and enure to the benefit of the successors and assigns of the parties hereto.

In witness whereof the Commission and the Corporation have respectively affixed their corporate seals and the hands of their proper officers.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO.

(Sgd.) I. B. LUCAS, *Vice-Chairman*.

(Seal).

(Sgd.) W. W. POPE, *Secretary*.

MUNICIPAL CORPORATION OF THE TOWN OF WINGHAM.

(Sgd.) W. H. GURNEY, *Mayor*.

(Seal).

(Sgd.) JOHN F. GROVES, *Clerk*.

RIGHT-OF-WAY

The work of this department for 1920 exceeded both in quantity and area covered that of any year since the inception of the Commission's operations.

The construction of low tension lines in the Counties of Huron and Bruce, being an extension of the Eugenia System necessitated the acquisition of a large number of pole, anchor and tree rights, as also did the extension of the St. Lawrence System in the Counties of Stormont and Glengarry.

A line was also built from Merritton to St. Catharines, and final work was done on several lines on the Central Ontario System as well as on some existing lines of the Niagara System.

Negotiations have been carried on with the Department of Lands and Forests in connection with the right-of-way for the Nipigon Transmission Lines as well as the securing of certain flooding rights required for the development work at Cameron's Falls.

Hydro-Electric Railway Lines

During the early part of the season, operations in connection with the purchase of the right-of-way for the Toronto-St. Catharines Line were commenced and a large percentage of such right-of-way was acquired. On that part of the line between Port Credit and Oakville the greater part of the land was actually purchased and paid for, and between Stony Creek and St. Catharines agreements for the purchase of the greater part of the right-of-way were taken from the owners.

Hanover Quarry and Spur Line Railway

The purchase of the Scanlon Farm, in the Township of Brant, near Hanover, for the purpose of securing a supply of cement material and the purchase of a right-of-way for a railway spur to connect this quarry with the Grand Trunk Railway has been completed. This necessitated the acquisition of thirteen parcels of land.

Essex Railway Lines

The purchase of the Sandwich, Windsor and Amherstburg Railway and The Windsor and Tecumseh Railway necessitated the investigation of the titles of the lands owned by those companies covering over two hundred parcels.

General Operations

To secure additional office accommodation, the building on the corner of Centre avenue and Elm street, in the City of Toronto, recently occupied by the Prest-O-Lite Company, was purchased.

In order to proceed with the proposed power development at Ranney's Falls, it was found necessary to secure additional lands, and a parcel was purchased from The Northumberland Paper and Electric Company.

Right-of-way was secured for the extension of the Cobourg Waterworks System, in that town.

The sale to the Town of Napanee of the Waterworks, and the other properties in that town, no longer required by the Commission, was negotiated and the necessary Order in Council secured from the Government authorizing the transfer.

(These properties came over with the purchase of the assets of the Eastern Power Company.)

The local distribution system and station in Port Colborne was also sold to that municipality and the transfer completed.

Chippawa Development

Twenty-two additional parcels of land required in connection with this work, principally for the right-of-way of the Queenston Power House Railway, and for dredging operations on the Chippawa Creek, were secured during the year.

LOW TENSION LINES

St. Lawrence System

Lines were built and the necessary pole, anchor and guy rights, as well as damage claims were arranged for, on the following lines:—

1. Cornwall Station to Grant's Corners.
2. Grant's Corners to Martintown.
3. Martintown to Apple Hill.
4. Apple Hill to Dominionville Junction.
5. Dominionville Junction to Maxville.
6. Dominionville Junction to Alexandria.
7. Martintown to Williamstown.
8. Williamstown to Lancaster.
9. Toronto Paper Company's Station to Beaver Board Works at Cornwall.

Anchor and Guy rights were secured on the following lines:—

1. Toronto Paper Company's Station to Cornwall Station.
2. Cornwall Station to Farran's Point.
3. Farran's Point to Morrisburg.

Eugenia System

Extensive additions were made to this system in the Counties of Huron and Bruce, the following lines having been constructed and the necessary low-tension rights secured.

1. Hanover to Walkerton.
2. Hanover to Junction Pole.
3. Teeswater to Wingham.
4. Holyrood to Lucknow.
5. Holyrood to Ripley.
6. Walkerton to Teeswater.
7. Teeswater to Teeswater Station.
8. Teeswater to Kinloss.
9. Wingham to Wingham Junction.
10. Kinloss to Holyrood Junction.
11. Kinloss Junction to Kincardine.

Tree rights were secured on the line from Lucan to Ailsa Craig, and a line was constructed and the usual rights secured from Merritton to St. Catharines.

The work of securing the necessary rights was completed on the following lines:

Central Ontario System

1. Healey Falls to Norwood.
2. Healey Falls to Ontario Rock Company's Quarry.
3. Auburn Station to Lakefield.
4. Norwood to Auburn Step-up Station.

Wasdell's System

1. Gamebridge to Kirkfield.

Rideau System

1. Carelton Place to Smith's Falls.

Miscellaneous

Sites for Low-Tension Stations were purchased at Teeswater, Holyrood and Norwood.

Considerable work was done in connection with the Right-of-Way for the High Tension Line between Cameron Falls and Port Arthur.

The terms of the agreement with the Township of Stamford relative to the closing and transfer of certain roads in the Township to the Commission, have been completed.

Settlements have been made of a number of accident claims, chiefly in connection with the Chippawa Development work.

SUMMARY

Settlements effected during the year by this department:

132 Pole agreements, covering 752 poles.

325 Anchor agreements, for 439 anchors.

439 Tree agreements.

89 Agreements for miscellaneous and damage claims.

206 Agreements for the purchase of land.

It has not been necessary to resort to arbitration on any case during this year.

SECTION II

TRANSMISSION SYSTEMS

HIGH-TENSION TRANSMISSION LINES

Transmission Line Records

The total mileage of lines built and acquired by the Commission up to October 31st, 1920, for the various systems is indicated in the following table:

Niagara System—110,000 volts, steel tower lines.....	466.90 miles.
Niagara System—46,000 volts, and less, steel and wood supports	998.53 “
Ontario Power Company	88.67 “
Essex County System	71.10 “
Severn System	167.89 “
Waddell's System	78.20 “
Eugenia System	251.31 “
Muskoka System	26.32 “
Nipissing System	24.70 “
Central Ontario System	411.22 “
Rideau System	68.72 “
St. Lawrence System	96.79 “
Thunder Bay System	35.81 “
Total	2,786.16 miles.

110,000-Volt Lines, 25-Cycle—Niagara System

New Sec- tion No.	Old Sec- tion No.	From	To	Length	No. of Steel Towers	Tower spac- ing	No. of cir- cuits	Conductors	Ground Cable	Length of Teleph.	Number of Teleph. Poles	No. and size of Copper B.&S. Telephone Wires
N.						Feet						
1x2	A	Niagara	Dundas	51.0	570	550	2	312,000 c.m. Al. S.R.	5/16 "	54.16	2,204	4-No. 10 and 4-No. 9
2x13	AA	Niagara	Dundas	50.0	451	630	2	4/0 Copper	5/16 "	50.00	1,405	2-No. 9
13x16	B	Dundas	Toronto	39.1	431	550	2	312,000 c.m. Al. S.R.	5/16 "	35.87	1,519	2-No. 10 and 4-No. 9
16x3	BB	Dundas	York	34.6		630			5/16 "	None	(Towers only erected)	2 No. 8 BWG
2x12	C	Dundas	Brant	22.6	251	550	2	336,000 c.m. Al. S.R.	5/16 "	22.9	957	2-No. 10 and 2-No. 9
12x10	D	Brant	Woodstock	21.8	231	550	2	336,000 c.m. Al. S.R.	5/16 "	21.53	888	2-No. 10 and 2-No. 9
10x4	E	Woodstock	London	25.4	278	550	2	336,000 c.m. Al. S.R.	5/16 "	26.03	1,074	2-No. 10 and 2-No. 11
2x5	F	Dundas	Guelph	25.3	270	550	1	336,000 c.m. Al. S.R.	5/16 "	26.12	1,093	2-No. 10 and 2-No. 11
5x6	G-1	Guelph	Preston	10.6	115	550	1	266,800 c.m. Al. S.R.	5/16 "	13.92	535	2-No. 10 and 2-No. 12
6x7	G-2	Preston	Kitchener	8.1	91	550	1	266,800 c.m. Al. S.R.	5/16 "	7.95	400	2-No. 10 and 2-No. 12
7x8	H	Kitchener	Stratford	25.1	267	550	1	312,000 c.m. Al. S.R.	5/16 "	28.75	1,164	2-No. 10 and 2-No. 11
8x9	I	Stratford	St. Mary's	13.5	147	550	1	266,800 c.m. Al. S.R.	5/16 "	15.28	634	2-No. 10 and 2-No. 12
9x4	J	St. Mary's	London	23.6	250	550	1	266,800 c.m. Al. S.R.	5/16 "	27.81	1,204	2-No. 10 and 2-No. 11
4x11	K	London	St. Thomas	13.4	141	550	2	266,800 c.m. Al. S.R.	5/16 "	16.09	696	2-No. 10 and 2-No. 12
11x14	L	St. Thomas	Kent	58.0	486	660	2	3/0 Copper	5/16 "	58.04	2,370	4-No. 9
14x15	M	Kent	Essex	44.8	370	660	2	3/0 Copper	5/16 "	44.80	1,829	4-No. 9
				466.9								
										449.25		

Note—Section “A” has fifty miles 312,000 c.m. Al. S.R. and one mile 4/0 Copper.
“B” has 35.3 miles 312,000 c.m. Al. S.R. and 3.8 miles 4/0 Copper.
“C” has 3 only circuits of copper telephone two No. 9 and one number 10.
The fourth circuit is No. 8 B.W.G. copper-clad steel.
“H” has 23.9 miles 312,000 c.m. Al. S.R. and 1.2 miles 266,800 c.m. Al. S.R.

DISTRIBUTION FEEDERS

Wood pole lines were constructed as follows:

Niagara System:

From Ailsa Craig to Parkhill—

4,000-volt, 8.8 miles, completed August 22, 1920.

From Bothwell to Glencoe—

4,000-volt, 11.88 miles, completed May 6, 1920.

From Malvern to Markham—

4,000-volt, 6.1 miles, completed June 28, 1920.

From Junction on L.T. 181 to W. D. Reid & Son, Streetsville—

4,000-volt, .23 miles, completed March 3, 1920.

St. Lawrence System:

From Martintown to Lancaster—

4,000-volt, 11.7 miles, not completed on October 31, 1920.

Preliminary plans were made to change the conductors on the Hanover-Neustadt Line, Eugenia System from No. 6 copper to No. 3-0 S.R. aluminum, on account of increased load in Neustadt. This circuit is 4,000-volt, 6.01 miles in length.

LOW TENSION TRANSMISSION LINES

The following low-tension lines of voltages varying from 2,200 to 110,000 volts were completed and placed in service up to October 31, 1920.

The mileage of these lines is distributed among the various systems, as follows:

Niagara System	998.53
St. Lawrence System	96.79
Severn System	167.89
Wasdell's System	78.20
Eugenia System	251.31
Muskoka System	26.32
Central Ontario System	135.62
Rideau System	68.72
Thunder Bay System	27.56
	<hr/>
	1,850.94 miles

On October 31, 1920, there were under construction 99.30 miles of low-tension transmission lines of voltages varying from 2,200 to 110,000 volts. The mileage of these lines is distributed among the various systems, as follows:

Niagara System .....	.....
St. Lawrence System	34.15
Severn System .....	.....
Wasdell's System .....	.....
Eugenia System	23.45
Muskoka System .....	.....
Central Ontario System .....	.....
Rideau System .....	.....
Thunder Bay System	41.70
	<hr/>
	99.30 miles

LINES COMPLETED AND UNDER CONSTRUCTION

October 31, 1919 to October 31, 1920

Voltage.	Completed.	Under Construction.	Total.
110,000	27.56	41.70	69 26
44,000	69.98	52.90	122.88
26,400	14.24	.....	14.24
22,000	11.34	.....	11.34
13,200	7.14	.....	7.14
6,600	13.93	.....	13.93
4,000	27.66	4.70	32.36
2,200	2.70	.....	2.70
Total	174.55	99.30	273.85

MILES OF TRANSMISSION LINES COMPLETED AND UNDER CON-
STRUCTION BY THE LINE CONSTRUCTION DEPARTMENT
FOR THE VARIOUS SYSTEMS

October 31, 1919 to October 31, 1920

Niagara System	34.01
St. Lawrence System	36.63
Severn System .....	.....
Waddell's System	12.35
Eugenia System	65.10
Muskoka System .....	.....
Central Ontario System	42.26
Rideau System	14.24
Thunder Bay System	69.26
Total	273.85 miles
Span Miles, Single Circuit.....	273.85
" Double Circuit .....	.....
Total	273.85 miles
Power Conductors:	
Steel Reinforced Aluminum	267.91
Aluminum .....	.....
Copper .....	.44
Steel	5.50
Total	273.85 miles
Ground Cable:	
Steel	270.14
Iron .....	.....
Total	270.14 miles
Telephone Wire:	
3 x No. 12 Steel	34.15
3 x No. 13 Steel	97.59
Aluminum, S.R.	72.58
Iron	19.74
Total	224.06 miles
Aluminum:	
1/0 Steel Reinforced	59.60
125,000 C.M. Reinforced	14.20
4/0 Steel Reinforced	97.59
2—Steel Reinforced	91.32
Total	262.75 miles

Copper:	
No. 6 Copper .....	.22
No. 2/0 Copper .....	.22
Total .....	.44 miles
Steel Cable Power:	
5/16" Steel	10.66
Total	10.66 miles
Ground Cable:	
1/4" Steel	19.53
9/32" Steel	184.23
5/16" Steel	66.38
Total	270.14 miles
Average Spans for Poles:	
120 ft., 125 ft., 132 ft., 150 ft., 160 ft., 300 ft., 325 ft. and 330 ft.	

Total Mileage of Lines and Number of Poles

	To Oct. 31st, 1919	Oct. 31st, 1919, to Oct. 31st, 1920	Totals to Oct. 31st, 1920
Total mileage low tension lines completed	1,676.39	174.55	1,850.94
Total mileage low tension lines under construction..	91.40	99.30	99.30
Total mileage single circuit lines completed	1,284.72	174.55	1,459.27
Total mileage double circuit lines completed....	361.48	.....	361.48
Total mileage three circuit lines completed....	29.09	.....	29.09
Total mileage four circuit lines completed	1.10	.....	1.10
Total mileage telephone lines completed.....	1,467.66	129.46	1,597.12
Total mileage telephone lines under construction..	91.40	94.60	94.60
Number of poles erected,	76,656	5,500	82,156
Number of towers erected	446	2	448
Number of poles under construction .....	.....	2,149	2,149

TRANSMISSION AND TELEPHONE LINES

Total Weights and Mileages of Cable and Wire

Cable and Wire	Wire Miles			Weights in Pounds		
	Completed to Oct. 31st, 1919	Completed Oct. 31st, 1919 to Oct. 31st, 1920	Under con- struction Oct. 31st, 1920	Completed Oct. 31st, 1919	Completed Oct. 31st, 1919 to Oct. 31st, 1920	Under con- struction Oct. 31st, 1920
Aluminum	4,129.81	.....	.....	2,864,381	.....	.....
Steel Reinforced						
Aluminum....	840.55	640.99	292.42	498,928	503,749	276,080
Copper Wire.....	1,069.07	1.32	.....	2,467,351	1,705	.....
Copper Clad Steel	1,217.36	.....	.....	230,466	.....	.....
Galv. Iron Wire...	1,841.48	28.48	11.00	777,242	8,686	3,355
Galv. Steel						
Cable....	1,775.80	111.78	183.68	1,296,669	44,823	104,039
Total.....	10,874.07	782.57	487.10	8,135,037	558,963	383,474

The Mileage of Lines Tabulated According to Voltage and Number of Circuits

Voltage	Single Circuit Totals				Double Circuit Totals				Three Circuit Totals				Four Circuit Totals				1-2-3-4-Circuit Totals			
	Completed Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Under Construction Oct. 31, 1920	Oct. 31, 1920 to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Under Construction Oct. 31, 1920	Oct. 31, 1920 to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Completed Oct. 31, 1919 to Oct. 31, 1920	Under Construction Oct. 31, 1920	Oct. 31, 1920 to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Completed Oct. 31, 1919 to Oct. 31, 1920	Under Construction Oct. 31, 1920	Oct. 31, 1920 to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Completed Oct. 31, 1919 to Oct. 31, 1920	Under Construction Oct. 31, 1920	Oct. 31, 1920 to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920
110,000	.....	27.56	41.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27.56	41.70	.....	.....	27.56
46,000 }	137.86	69.98	52.90	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69.98	52.90	.....	.....	69.98
44,000 }				.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			.....	.....
26,400..	332.98	14.24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.24	.....	.....	.....	14.24
22,000..	256.62	11.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11.34	.....	.....	.....	11.34
13,200..	311.95	7.14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.14	.....	.....	.....	7.14
12,000..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6,600..	13.00	13.93	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.93	.....	.....	.....	13.93
4,000..	207.77	27.66	4.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27.66	4.70	.....	.....	27.66
2,200..	24.54	2.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.70	.....	.....	.....	2.70
Total.	1,284.72	174.55	99.30	361.48	29.09	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,676.39	174.55	99.30	.....	1,850.94

Gauge, Length and Weight of Conductors
TRANSMISSION LINES, INCLUDING GROUND CABLE

Browne & Sharpe Gauge	Wire Miles		Weight Pounds			Miles Single Circuit Lines			Miles Double Circuit Lines			Total Single Circuit and Double Circuit Lines completed Oct. 31, 1920
	Completed to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Completed to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Under construction to Oct. 31, 1920	Completed to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Under construction to Oct. 31, 1920	Completed to Oct. 31, 1919	Completed Oct. 31, 1919 to Oct. 31, 1920	Under construction to Oct. 31, 1920	
400,000 c.m. Alum.	1.54	.....	3,032	.....	.....	.49	.....	.....	.....	.....	.....	.49
4/0 Aluminum.....	183.85	.....	243,049	.....	.....	.....	.....	.....	30.49	.....	.....	30.49
3/0 ".....	2,165.13	.....	1,801,307	.....	.....	242.89	.....	.....	221.93	.....	.....	464.82
2/0 ".....	89.46	.....	58,954	.....	.....	.....	.....	.....	14.20	.....	.....	14.20
1/0 ".....	1,045.01	.....	546,539	.....	.....	225.16	.....	.....	53.25	.....	.....	278.41
2 ".....	644.82	.....	211,500	.....	.....	117.85	.....	.....	43.43	.....	.....	161.28
2 S.R. ".....	610.06	.....	296,942	.....	49,120	194.33	62.33	33.69	.....	.....	.....	256.66
125,000 c.m. S.R. Aluminum.....	190.62	42.72	171,446	.....	.....	63.54	14.24	.....	.....	.....	.....	77.78
1/0 S.R. Aluminum.....	39.87	124.95	30,540	.....	30,378	12.68	41.65	13.25	.....	.....	.....	54.31
4/0 S.R. ".....	.....	167.67	.....	.....	191,653	.....	27.56	41.70	.....	.....	.....	27.56
250,000 c.m. Copper	1.54	.....	6,246	.....	.....	.49	.....	.....	.....	.....	.....	.49
4/0 Copper.....	154.35	.....	520,931	.....	.....	.....	.....	.....	16.75	.....	.....	16.75
2/0 ".....	126.18	.66	272,819	.....	.....	41.30	.22	.....	.31	.....	.....	41.83
1/0 ".....	227.09	.....	1,386,427	.....	.....	57.93	.....	.....	8.10	.....	.....	66.03
2 ".....	10.71	.....	11,331	.....	.....	3.40	.....	.....	.....	.....	.....	3.40
4 ".....	154.01	.....	103,433	.....	.....	49.24	.....	.....	.63	.....	.....	49.87
6 ".....	395.19	.66	166,164	.....	.....	127.92	.22	.....	.....	.....	.....	128.14
1/4 in. Steel Cable.	157.51	14.83	101,641	.....	2,975	18.52	14.83	4.70	.....	.....	.....	33.35
9/32 ".....	219.37	113.56	199,209	.....	64,893	132.78	113.56	70.69	.....	.....	.....	246.34
7/16 ".....	7.71	.....	16,684	.....	.....	2.57	.....	.....	.....	.....	.....	2.57
5/16 ".....	194.60	42.45	220,964	.....	64,888	67.28	42.45	34.57	.....	.....	.....	109.73
6 B.W.G. Galv. Iron.	203.01	.....	119,468	.....	.....	63.98	.....	.....	.....	.....	.....	63.98
Total.....	6,821.63	694.49	6,488,626	646,302	403,907	1,422.33	317.06	198.60	389.09	.....	.....	2,128.48

Size of Telephone Wire used on Telephone Lines

COMPLETED OCT. 31, 1919, to OCT. 31, 1920

Section No.	Mileage	Gauge
N472 x 42.....	6.34	No. 6 Steel Reinforced Aluminum
W56 x 6.....	11.34	No. 6 " " "
E 8 x 70.....	7.25	No. 6 " " "
E70 x 71.....	8.75	No. 6 " " "
E71 x 21.....	7.15	No. 6 " " "
E71 x 74.....	5.75	No. 6 " " "
E74 x 25.....	12.75	No. 6 " " "
R55 x 5.....	14.24	No. 9 B.W.G. Iron
P52 x 53.....	9.05	3 x No. 13 Galv. Steel
P53 x 54.....	18.51	3 x No. 13 " "
C14 x 31.....	10.44	3 x No. 13 " "
C31 x 19.....	17.89	3 x No. 13 " "
Total.....	129.46 Miles	.....

Size of Telephone Wire used on Telephone Lines

UNDER CONSTRUCTION OCT. 31, 1920

Section No.	Mileage	Gauge
E21 x 72 "E".....	8.50	No. 6 Steel Reinforced Aluminum
E72 x 22 "E".....	4.75	No. 6 " " "
E74 x 24 "E".....	5.50	No. 9 B.W.G. Galv. Iron
L 1 x 66 "E".....	8.06	3 x No. 12 Galv. Steel
L66 x 13 "E".....	4.79	3 x No. 12 " "
L13 x 14 "E".....	5.16	3 x No. 12 " "
L14 x 67 "E".....	2.18	3 x No. 12 " "
L67 x 15 "E".....	8.80	3 x No. 12 " "
L67 x 17 "E".....	5.16	3 x No. 12 " "
P 1 x 51 "E".....	19.13	3 x No. 13 " "
P51 x 52 "E".....	22.22	3 x No. 13 " "
P54 x 2 "E".....	.35	3 x No. 13 " "
Total.....	94.60 Miles	.....

"E" estimated

TELEPHONE LINES
Gauge, Length and Weight of Aluminum, Copper Clad Steel and Galvanized Iron Wire

Gauge	Wire Miles				Weight in Pounds				Single Circuit Mileage			
	Completed to Oct. 31st, 1919	Completed Oct. 31st, 1919 to Oct. 31st, 1920	Under con- struction to Oct. 31st, 1920	Completed to Oct. 31st, 1920	Completed to Oct. 31st, 1919 to Oct. 31st, 1920	Under con- struction to Oct. 31st, 1920	Completed to Oct. 31st, 1920	Completed to Oct. 31st, 1919	Completed Oct. 31st, 1919 to Oct. 31st, 1920	Under con- struction to Oct. 31st, 1920	Completed to Oct. 31st, 1920	Completed to Oct. 31st, 1920
No. 8 B. & S., C.C. steel..	207.52	.....	.....	207.52	50,842	.....	50,842	103.76	.....	.....	103.76	.....
No. 10 " "	1,006.90	.....	.....	1,006.90	181,638	.....	181,638	503.45	.....	.....	503.45	.....
No. 9 B.W.G. Gal. Iron ..	1,437.58	28.48	11.00	1,466.06	490,108	8,686	498,794	718.79	14.24	5.50	733.03	.....
No. 10 " "	283.32	.....	.....	283.32	70,580	.....	70,580	141.66	.....	.....	141.66	.....
No. 3 x 12 Gal.Steel	.....	.....	68.30	.....	.....	.....	.....	.....	.....	34.15	.....	.....
No. 3 x 13 " "	.....	111.78	83.40	111.78	.....	44,823	44,823	.....	55.89	41.70	55.89	.....
No. 6 S.R. Aluminum	.....	118.66	26.50	118.66	.....	22,070	22,070	.....	59.33	13.25	59.33	.....
Total....	2,935.32	258.92	189.20	3,194.24	793,168	75,579	868,747	1,467.66	129.46	94.60	1,597.12	.....

ONTARIO POWER COMPANY'S SYSTEM

Annual Report, October 31, 1920

Considerable attention has been given to the line records of the Ontario Power Company during the past year with a result that a complete tabulation of the lines are available as below:

					Total.
Total Mileage O.P. Co. Lines	.....				88.67
Total Poles Erected O.P. Co. Lines	.....				35.02
Total Steel Towers O.P. Co. Lines	.....				1.50
Total Mileage—Single Circuit Lines	.....				8.36
Total Mileage—Double Circuit Lines	.....				80.31
Total Span Miles—52,608 C.M. Alum.	.....				2.00
"	"	173,000	"	.....	11.48
"	"	345,000	"	.....	43.71
"	"	500,000	"	.....	14.06
"	"	820,000	"	.....	12.23
					83.48
Total Span Miles—1/0 B. & S. Copper	.....				.36
"	"	1	"	"	.29
"	"	2	"	"	1.51
"	"	3	"	"	4.33
"	"	6	"	"	.32
					6.81
Telephone Line:					
Total Span Miles No. 12 B.W.G. Galv. Iron	.....				43.08
Total Wire Miles—52,608 C.M. Alum.	.....				6.00
"	"	173,000	"	.....	58.59
"	"	345,000	"	.....	248.31
"	"	500,000	"	.....	84.36
"	"	820,000	"	.....	73.38
					470.64
Total Wire Miles—1/0 B. & S. Copper	.....				1.06
"	"	1	"	"	.87
"	"	2	"	"	4.53
"	"	3	"	"	18.90
"	"	6	"	"	4.32
					29.68
Total Wire Miles No. 12 B.W.G. Galv. Iron	.....				86.16
Total Weight—Wire Miles in Pounds:					
52,608 C.M. Alum.	.....				1,566 lbs.
173,000	"	.....			50,270 "
345,000	"	.....			424,858 "
500,000	"	.....			209,213 "
820,000	"	.....			298,436 "
					984.343 lbs.
Total Weight—Wire Miles in Pounds:					
1/0 B. & S. Copper	.....				1,787 lbs.
1	"	"	.....		1,163 "
2	"	"	.....		4,806 "
3	"	"	.....		15,895 "
6	"	"	.....		1,814 "
					25,465 "
Total Weight—Wire Miles in Pounds:					
No. 12 B.W.G. Galv. Iron	.....				14,475 lbs.

ONTARIO POWER COMPANY
TRANSMISSION AND TELEPHONE LINES
Total Weights and Mileage of Cable and Wire

Cable and Wire	Wire Miles	Weight in Pounds
Aluminum Cable	470.64	984,343
Copper Wire	29.68	25,465
Galv. Iron Wire	86.16	14,475

ONTARIO POWER COMPANY
The Mileage of Lines Tabulated according to Voltages
and Number of Circuits

Voltage	Single Circuit Totals	Double Circuit Totals	Total Single and Double Circuits
66,000		12.33	12.33
30,000		13.20	13.20
12,000	8.36	54.88	63.24
Total	8.36 miles	80.31 miles	88.67 miles

THE ONTARIO POWER COMPANY
Gauge Length and Weight of Conductors—Transmission Lines

B. & S. Gauge	Wire, Miles	Weight, Pounds	Miles, S.C. Lines	Miles, D.C. Lines	Total Single and Double Circuits
52,608 C.M. Alum.....	6.00	1,566	2.00	.....	2.00
173,000 " "	58.59	50,270	3.43	8.05	11.48
345,000 " "	248.31	424,858	4.80	39.06	43.86
500,000 " "	84.36	209,213	.....	14.06	14.06
820,000 " "	73.38	298,436	.....	5.23	6.23
1/0 B. & S. Copper	1.06	1,787	.36	.....	.36
1 " " .....	.87	1,163	.29	.....	.29
2 " "	4.53	4,806	1.51	.....	1.51
3 " "	18.90	15,895	3.48	.85	4.33
6 " "	4.32	1,814	.....	.72	.72
Total	500.32	1,009,808	15.87	68.97	84.84

TELEPHONE LINES
Gauge, Length and Weight of Galvanized Iron Wire

Gauge	Wire, Miles	Weight in Pounds	Single Circuit, Miles
No. 12 B.W.G. Galv. Iron Wire.....	86.16	14,475	43.08
Total	86.16	14,475	43.08

				Description
				ONTARIO POWER
New Section Number	Old Section Number	From	To	Aver. Length of Poles
				feet
A 2 x 264	A & B	O.P.C. Transf. Station	Jct. Pole No. 358 (Pt. Robinson).	40
A 264 x 76	A & B	Jct. Pole No. 358 (Pt. Robinson).	“ No. 419 (Glass Co.) ...	35
A 276 x 78	A & B	“ No. 419 (Glass Co.)....	“ No. 443 (Beaver Board)	35
A 278 x 19	A & B	“ No. 443 (Beaver Board)	Ontario Paper Co.	35
A 264 x 4	A & B	“ No. 358 (Pt. Robinson).	Port Robinson.....	35
A 276 x 16	A & B	“ No. 419 (Glass Co.)....	Glass Co.....	35
A 278 x 18	A & B	“ No. 443 (Beaver Board)	Beaver Board Co.....	35
A 2 x 63	E & F	O.P.C. Transf. Station	Tie Jct. Pole No. 613.....	35
A 2 x 261	G & H	O.P.C. Transf. Station	Jct. Pole No. 18 (Niagara Falls City)	35
A 261 x 81	G & H	Jct. Pole No. 18 (Niagara Falls City)	Jct. Pole No. 76 (Norton Sub.).	35
A 281 x 72	G & H	Jct. Pole No. 76 (Norton Sub.).	“ No. 595 (Elect. Metals)	35
A 272 x 12	G & H	“ No. 595 (Elect. Metals)	Electro Metals	45
A 272 x 73	G & H	“ No. 595 “	Jct. Pole No. 602 (Can. Steel) ...	35
A 273 x 80	G & H	“ No. 602 (Can. Steel)...	Empire Cotton Co.	35
A 272 x 74	G & H	“ No. 595 (Elect. Metals)	Jct. Pole No. 606 (Page Hersey Co.)	35
A 274 x 14	G & H	“ No. 606 (Page Hersey Co.)	Page Hersey Co.....	35
A 273 x 13	G & H	Jct. Pole No. 602 (Can. Steel Co.)	Can. Steel Co.	35
A 274 x 45	G & H	“ No. 606 (Page Hersey Co.)	Dain Manufacturing Co.	35
A 2 x 268	J & K	O.P.C. Transf. Station	Jct. Pole No. 18 (Niagara Falls City)	40
A 268 x 77	J & K	Jct. Pole No. 18 Niagara Falls City)	Jct. Pole No. 331 (Coniagas Co.).	40
A 277 x 17	J & K	Jct. Pole No. 331 (Coniagas Co.).	Coniagas Sub-Station	35
A 219 x 77	J & K	“ No. 331 “	Ontario Paper Co.	50
A 277 x 63	J & K	“ No. 331 “	Jct. Pole No. 369 (Thorold)	35
I 51 x 1	J & K	“ No. 369 (Thorold)....	Thorold Sub-Station.....	35
A 263 x 38	J & K	“ No. 369 “	Merritton Sub-Station	35
	J & K	Merritton Sub-Station	Jct. Pole No. 604	35
	J & K	Jct. Pole No. 604	Kinleith Paper Co.....	35
	J & K	“ No. 604	Jct. Pole No. 614	35
	J & K	“ No. 614	Metal Drawing Co.....	40
	J & K	“ No. 614	St. Catharine's Sub-Station.....	40
	J & K	“ No. 649	McKinnon's Industrial Sub.....	45
	J & K	“ No. 658	Electric Metal Co.	30
	J & K	“ No. 665	Steel Rad. Co.....	35
	J & K	“ No. 691	Can. Crocker Wheeler Co.....	55
A 2 x 209	L & M	O.P.C. Transf. Station	Amer. Cyanamid Co.	35
A 2 x 269	O & P	“ “ “	Jct. Pole No. 98 (Niagara Falls City)	35
A 269 x 9	O & P	Jct. Pole No. 98 (Niagara Falls City)	American Cyanamid Co.....	35
A 2 x 666	R & S	O.P.C. Transf. Station	Jct. Pole No. 30 (C.N.P.Co.)....	35
A 266 x 81	R & S	Jct. Pole No. 30 (C.N.P.Co.) ...	“ No. 70 (Norton Co.)....	35
A 281 x 6	R & S	“ No. 70 (Norton Co.)...	Montrose Sub-Station.....	35
A 16 x 266	R & S	“ No. 30 (C.N.P.Co.)	Canadian Niagara Power Co.....	.....
A 265 x 21	R & S	“ No. 180 (Chippawa) ...	Norton Co.	35
A 281 x 65	R & S	“ No. 70 (Norton Co.)...	Jc Pole No. 180 (Chippawa) ...	35
A 2 x 71	1 & 2	O.P.C. Transf. Station	Niagara River Crossing .....	.....
	21 & 24	“ “ “	Toronto Power Co.....	35
A 15 x 2	22 & 23	“ “ “	Toronto Power Co.....	40

of Lines

CO. SYSTEM

Aver. Span	Miles	No. of Poles	Volt- age	No. of Cir- cuits	Power Cable	Tel. Wire	Ground Cable	Remarks
feet								
100	6.80	358	12,000	2	345,000 C.M. Alum.	No. 12 Iron	.....	O.P.C. Lines taken over by H.E.P.C., Aug. 1, 1917
120	1.37	61	"	2	" "	"	.....
120	.53	24	"	2	" "	"	.....
120	.70	32	"	2	" "	"	.....
120	2.00	122	"	1	52,608 "	"	.....
120	.04	2	"	2	345,000 "	"	.....
120	.04	2	"	2	" "	No. 12 Iron	.....
120	13.20	613	30,000	2	" "	"	.....
120	.41	18	12,000	2	" "	No. 12 Iron	.....	" D " Line Taps " H " Line Disconnected
120	1.32	58	"	2	" "	"	.....
120	11.79	519	"	2	" "	"	.....
120	.36	16	"	2 {	1/0 B. & S. Copper	}	.....
120	.15	7	"	2 {	3 " "		.....
120	1.70	75	"	2 {	345,000 C.M. Alum.	}	No. 12 Iron	
120					173,000 "		.....
120	.25	11	"	2	3 B. & S. Copper	No. 12 Iron	.....
120	.20	9	"	2	3 " "	"	.....
120	.25	18	"	2	3 " "	"	.....
120	1.52	67	"	1	173,000 C.M. Alum.	"	.....
120	.40	18	"	2	500,000 "	"	.....	" C " Line Taps " J " Line
120	7.12	313	"	2	" "	"	.....
120	.72	132	"	2	6 B. & S. Copper	"	.....
120	.13	7	"	2	500,000 C.M. Alum.	"	.....
120	.90	40	"	2	345,000 "	"	.....
120	1.04	46	"	1	3 B. & S. Copper	.....	.....	Owned by H.E.P.C.
120	2.45	108	"	2	173,000 C.M. Alum.	No. 12 Iron	.....
120	2.88	127	"	2	" "	"	.....	} Owned by St. Cath- arine's Hydro System
120	1.51	22	"	1	2 B. & S. Copper	.....	.....
120	.22	10	"	2	345,000 C.M. Alum.	No. 12 Iron	.....
120	.04	2	"	2	2 B. & S. Copper	"	.....
120	1.02	45	"	2	345,000 C.M. Alum.	"	.....
120	1.95	86	"	1	3 B. & S. Copper	.....	.....
120	.29	13	"	2 {	345,000 C.M. Alum.	}	.....
120					1 B. & S. Copper		.....
120	.21	11	"	1	173,000 C.M. Alum.	.....	.....
120	.13	6	"	1	3 B. & S. Copper	.....	.....
100	2.67	141	"	2	500,000 C.M. Alum.	.....	.....
100	1.85	98	"	2	" "	No. 12 Iron	.....	" C " Line Taps " O " Line
100	.76	40	"	2	" "	"	.....
130	.74	30	"	2 {	336,420 "	}	.....
130	.98	40	"	2 {	345,000 "		.....
130	1.23	50	"	2	" "	.....	.....
.....	.....	30	"	.....	.....	.....	.....
120	.22	10	"	2	173,000 C.M. Alum.	No. 12 Iron	.....
120	2.50	110	"	2	" "	"	.....	Disconnected
550 {	6.00	75 }	66,000	2	820,000 "	.....	.....
120 {	6.23	75 }				.....	.....
120	.72	32	12,000	2	345,000 "	.....	.....	Disconnected
100	1.13	60	"	2	500,000 "	.....	.....



Standard wishbone construction, Nipigon Transmission Line, looking north about three miles to Generating Station. (Ground wire not placed.)

Nipigon Lines

Construction work on the first wood pole line from Cameron's Falls to Nipigon to operate at 110,000 volts proceeded throughout the year and is practically ready for testing. In the course of the year an application has been received for power at Nipigon and a wood pole line is being constructed north-easterly along the C.P.R. from Sprucewood Junction so as to serve the local pulp industry. Surveys are also being made for the completion of a loop line from Cameron's Falls to Sprucewood by way of Nipigon.

Bruce and Huron County Lines

Extension of the Eugenia System westerly from Hanover so as to serve municipalities in the Counties of Bruce and Huron has taken a great part of the time of the construction force during the year. These lines conform largely to standard practice at 26,000 volts, with the exception that a larger insulator has been used so as to provide amply for subsequent operation, star connected.

St. Lawrence System Extensions

During the year considerable progress has been made with the building of 44,000 volt lines north and east from Cornwall station so as to serve a number of municipalities in this district, particularly Martintown and Lancaster. This work is nearing completion at the close of the fiscal year.

Restranging of Conductors

A considerable part of the construction work during the year has involved the removal of the small capacity conductors originally erected on various low tension lines and replacing them with conductors of ample size for the existing load and so as to take care of the expected demand during the next four or five years. A considerable part of this work was in the Wasdell's System between Wasdell's Falls and Cannington.

Description
NIAGARA

New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span.	Miles	No. of Poles	Voltage.
N.	L.T.			feet	feet			
2 x 201	1	Dundas H.T. Station.	Hamilton	50½	206	2.85	73	13,200
7 x 762	4	Kitchener H.T. Stat..	Junction Pole No 9	40	120	.18	10	"
762 x 2	5	Junction Pole No. 9..	Waterloo Mun. Stat.	40	120	1.64	79	"
762 x 1	6	Pole No. 10	Kitchener Mun. Stat.	45	120	.76	34	"
7 x 765	7	Kitchener H.T. Stat.	Junction Pole No. 405	40	120	9.09	405	"
765 x 66	7	Junction Pole No. 405	" " No. 463	40	120	1.29	58	"
766 x 37	7	" " No. 463	New Hamburg Dis.St.	40	120	1.89	92	"
765 x 35	7a	" " No. 405	Baden Dis. Stat.....	40	120	.11	7	"
10 x 1062	8	Woodstock H.T. Stat.	Junction Pole No. 76.	40	120	1.57	76	"
1062 x 64	8	Junction Pole No. 76.	" " No. 289	40	120	4.70	213	"
1064 x 73	8	" " No. 289	Pole No. 324	40	120	.83	35	"
1073 x 5	8	Pole No. 324	Ingersoll Mun. Stat..	40	120	2.80	131	"
10 x 1066	9	Woodstock H.T. Stat.	Junction Pole No. 508	40	120	11.08	508	"
1066 x 9	10	Junction Pole No. 508	Tillsonburg Mun. Sta.	40	120	10.30	467	"
1066 x 36	11	" " No. 508	Norwich Dis. Station	40	120	4.59	208	"
1036 x 8	11a	Norwich Dis. Stat. ..	Otterville	30	160	4.50	158	2,300
1036 x 7	11b	" " ..	Burgessville	30	160	3.25	115	"
11 x 1101	12	St.Thomas. H.T. Sta.	St. Thomas Mun. Sta.	40 & 45	120	1.13	47	13,200
6 x 664	14	Preston H.T. Station	Junction Pole No. 99.	45	120	2.04	99	{ 6,600 13,200
664 x 4	15	Junction Pole No. 99.	Hespeler Mun. Stat..	40	120	2.09	99	6,600
664 x 3	16	" " No. 99.	Galt Mun. Station...	40	120	3.75	175	13,200
6 x 601	17	Preston H.T. Station	Preston Corp. Station	35	120	.14	11	6,600
4 x 469	18	London H.T. Station.	Junction Pole No. 38.	40	120	.81	38	13,200
469 x 70	19	Junction Pole No. 38.	" " No. 99.	45	120	1.38	61	"
470 x 17	19	" " No. 99.	Asylum, London	45	120	.16	11	"
4 x 401	21	London H.T. Station.	London Mun. No. 1. .	40	120	3.57	178	"
469 x 1	20 &							
	22	Junction Pole No. 38.	London	40	120	2.91	151	"
13 x 1361	26	Cooksville H.T. Stat.	Junction Pole No. 6..	40	120	.08	6	"
1361 x 62	26	Junction Pole No. 6..	" " No. 84	40	120	1.79	78	"
1362 x 31	26	" " No. 84.	Port Credit Dis. Stat.	40	120	.32	16	"
1331 x 2	26a							
	& 26	Port Credit Dist. Stat.	Pt. Credit Brick Wks.	45	120	.88	43	"
13 x 1363	27	Cooksville H.T. Stat.	Junction Pole No. 30.	40	120	.57	30	"
1363 x 64	27	Junction Pole No. 30.	" " No. 89.	40	120	1.32	59	"
1364 x 68	27	" " No. 89.	" " No. 230	40	120	3.18	141	13,200
1368 x 4	27	" " No. 230	Brampton Mun. Sub.	40	120	6.17	276	"
866 x 6	28	" " No. 1550	Clinton Mun. Sub....	40	120	1.27	62	26,400
865 x 5	29	" " No. 1153	Seaforth "	40	120	1.50	74	"
863 x 3	30	" " No. 647.	Mitchell "	40	120	1.27	59	26,400
5 x 562	31	Guelph H.T. Station .	Junction Pole No. 70 .	40	120	1.46	70	13,200
562 x 2	31	Junction Pole No. 70.	Ont. Agric. College ..	40	120	.10	8	"
5 x 501	32	Guelph Struc. on Stat.						
1364 x		Property .....	.....	40	120	.08	5	"
1664	34	Junction Pole No. 89	Junction Pole No. 419	40	120	7.30	330	"
1664 x 63	34	" " No. 419	" " No. 564	40	120	3.24	145	"
1663 x 3	34	" " No. 564	Weston Mun. Station	40	120	1.62	75	"
601 x 2	35	Preston H.T. Stat. ..	Galt P. & H. Ry.....	40	120	.12	6	6,600
1362 x								
1661	36	Junction Pole No. 84.	Junction Pole No. 332	45	120	5.48	250	13,200
1631 x 61	36	" " No. 332	Etobicoke Dis. Stat...	45	120	.11	6	"
2 x 266	38	Dundas H.T. Station.	Junction Pole No. 260	40	120	5.44	260	"
266 x 35	38	Junction Pole No. 260	Dom. Sewer Pipe Co.	40	120	1.93	90	"
235 x 6	40 &							
	40a	Dom. Sewer Pipe Co.	Waterdown	35	120	3.43	72	2,200
11 x 1168	41	St. Thomas H.T. Stat.	Junction Pole No. 112	35	120	2.24	112	13,200

of Lines
SYSTEM

No. of Cir- cuits	Power Cable, B. & S. Gauge	Telephone Wire, B. & S. & B.W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
4	4/0 H.D. Copper	8 B&S Iron Wire	1" Gal. Steel	Apr. 7, 1915	Sept. 24, 1915	Oct. 4, 1915
4	1/0 Alum.	10 B&S C.C. Steel	1" "	Aug. 25, 1910	Sept. 11, 1910	
2	1/0 "	10 "	1" "	Sept. 11, "	Nov. 25, "	
2	1/0 "	10 "	1" "	Aug. 25, "	Sept. 11, "	
2	2 "	10 "	1" "	Sept. 11, "	Jan. 2, 1911	Feb. 3, 1911
2	2 "	10 "	1" "	Sept. 11, "	Jan. 2, "	Feb. 3, "
2	2 "	10 "	1" "	Sept. 11, "	Jan. 2, "	Feb. 3, "
2	2 "	10 "	1" "			
2	1/0 "	10 "	1" "	Nov. 14, 1910	Mar. 28, 1911	
2	1/0 "	10 "	1" "	Nov. 14, "	Mar. 28, "	
2	1/0 "	10 "	1" "	Nov. 14, "	Mar. 28, "	
2	1/0 "	10 "	1" "	Nov. 14, "	Mar. 28, "	
2	1/0 "	10 "	1" "	Jan. 2, 1911	Apr. 29, "	
2	1/0 "	10 "	1" "	Jan. 2, "	Apr. 29, "	
1	2 "	10 "	1" "	Feb. 13, "	Mar. 30, "	
1	No. 6 Copper	.....	1" "	.....	.....	1916
1	No. 6 "	.....	1" "	.....	.....	Dec. 7 1916
2	1/0 Alum	10 B&S CC. Steel.	1" "	Dec. 14, 1910	Dec. 30, 1910	
3 {	1-2 "	10 "	1" "	Oct. 8, 1910	Jan. 19, 1911	
1 {	2-4/0 "	10 "	1" "	Oct. 8, "	Dec. 30, 1910	
2 {	2 "	10 "	1" "	Oct. 8, "	Jan. 19, 1911	
1 {	2 Copper	10 "	1" "	Built by Pre	ston Corpora	tion
4 {	1-3/0 Alum	10 "	1" "	Oct. 26, 1910	Jan. 10, 1911	
3 {	3-2 "	10 "	1" "	Oct. 26, "	Jan. 19, "	
1 {	2 "	10 "	1" "	Oct. 26, "	Jan. 19, "	
2 {	3/0 "	10 "	1" "	Oct. 20, "	Jan. 20, "	
1 {	3/0 "	.....	1" "	Oct. 24, "	Jan. 20, "	
2 {	2 "	10 B&S C.C. Steel	1" "	Feb. 24, 1911	July 10, "	
2 {	2 "	10 "	1" "	Feb. 24, "	July 10, "	
2 {	2 "	10 "	1" "	Feb. 24, "	July 10, "	
2 {	2 "	10 "	1" "	Apr. 5, "	July 23, "	
2 {	2 "	10 "	1" "	Feb. 15, "	May 6, "	
2 {	2 "	10 "	1" "	Feb. 15, "	May 6, "	
2 {	2 "	10 "	1" "	Feb. 15, "	May 6, "	
2 {	2 "	10 "	1" "	Feb. 15, "	May 6, "	
2 {	3/0 "	10 "	1" "	Apr. 6, "	Aug. 4, "	
2 {	2 "	10 "	1" "	Mar. 25, "	Sept. 13, "	
2 {	2 "	10 "	1" "	Mar. 24, "	Aug. 3, "	
2 {	1-1/0 "	10 "	1" "	July 21, "	Nov. 9, "	
1 {	1-3/0 "	10 "	1" "	July 21, "	Nov. 9, "	
3 {	1-1/0 "	10 "	1" "	July 21, "	Nov. 9, "	
3 {	1/0 "	10 "	1" "	Aug. 7, "	Sept. 3, "	Sep. 4, 1911
2 {	2 "	8 "	1" "	Apr. 19 "	July 24, "	
2 {	2 "	8 "	1" "	Apr. 19, "	July 24, "	
2 {	2 "	8 "	1" "	Apr. 19, "	July 24, "	
1 {	1/0 "	10 "	1" "	Mar. 13, "	Mar. 21, "	
2 {	1- No. 2 S.R. Alum	8 "	1" "	Apr. 26, "	Feb. 29, 1912	
2 {	1-2 Alum.	8 "	1" "	Apr. 26, "	Feb. 29, "	
1 {	1- No. 2 S.R. Alum	8 "	1" "	Apr. 26, "	Feb. 29, "	
1 {	1-2 Alum.	8 "	1" "	July 21, "	Dec. 19, 1911	Apr. 6, 1912
1 {	2 "	8 "	1" "	July 21, "	Dec. 19, "	Apr. 6, "
1 {	2 "	8 "	1" "	Sept. 30, "	Oct. 10, "	Apr. 6, "
1 {	2 "	8 "	1" "	Oct. 16, "	Mar. 8, 1912	Mar. 9, "

Description of
NIAGARA

New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span	Miles	No. of Poles	Voltage
N.	L.T.			feet	feet			
1168 x 37	41	Junction Pole No. 112	Port Stanley Dis. Sta.	35	120	10.03	462	13,200
1034 x 13	42	Beachville Dis. Stat..	Beachville(cable only)	.....	.....	1.00	.....	2,200
2 x 263	43	Dundas H.T. Station.	Junction Pole No. 69.	40	120	1.21	65	13,200
735 x 6	44	Baden Dis. Stat.....	Wellesley	30	150	7.92	252	4,000
1064 x 34	45	Junction Pole No. 289	Beachville Dis. Stat..	30	50	.01	1	13,200
9 x 961	46	St. Mary's H.T. Stat.	Junction Pole No. 33.	40	120	.67	33	"
961 x 32	46	Junction Pole No. 33.	St. Mary's Por. Cem.					
			D.S.....	40	120	1.55	49	"
2 x 237	47	Dundas H.T. Station.	Caledonia Dis. Stat..	40	120	14.97	669	"
237 x 8	47a	Caledonia Dis. Stat..	Alabastine Co.....	.....	.....	.17	.....	2,200
237 x 70	48	" " "	Junction. Pole No. 941	40	120	6.10	267	13,200
270 x 39	49	Junction Pole No. 941	Hagersville Dis. Stat.	40	120	3.85	173	"
270 x 10	50	" " " "	Ontario Gypsum Co..	40	120	5.91	229	"
1631 x 61	51	Etobicoke Dis. Stat. .	Junction Pole No. 332	40	120	.11	6	"
1661 x 32	51	Junction Pole No. 332	Mimico Dis. Station .	40	120	.46	18	"
738 x 8	52	Metering Station	St. Petersburg and St.					
			Agatha.....	.....	.....	.....	76	.....
11 x 1162	55	St. Thomas H.T. Stat.	Junction Pole No. 5..	40	120	.04	5	13,200
1162 x 2	55	Junction Pole No. 5..	London & Lake Erie					
			Ry.	40	120	1.65	83	"
562 x 63	57	" " No. 70.	Junction Pole No. 118	40	120	1.07	48	"
563 x 65	57	" " No. 118	" " No. 155	40	120	.86	37	"
565 x 5	57a	" " No. 155	Prison Farm.....	40	120	.08	3	"
565 x 66	58	" " No. 155	Junction Pole No. 453	40	120	6.41	298	"
566 x 67	59	" " No. 453	" " No. 717	40	120	5.78	264	"
567 x 37	59	" " No. 717	Acton Dis. Station...	40	120	.07	5	"
237 x 7	61	Caledonia Dis. Stat..	Caledonia .....	.....	.....	.30	.....	2,200
1368 x 69	62	Junction Pole No. 230	Junction Pole No. 381	40	120	3.36	151	13,200
1369 x 8	62	" " No. 381	Milton Mun. Station .	40	120	13.36	592	"
567 x 68	65	" " No. 717	Junction Pole No. 1005	40	120	6.37	288	"
568 x 39	65	" " No. 1005	Georgetown Dis. Sta.	40	120	2.68	121	"
566 x 36	66	" " No. 453	Rockwood "	35	120	1.64	77	"
1261 x 68	68	" " No. 19.	Junction Pole No. 40.	40	120	.44	21	26,400
1268 x 8	68	" " No. 40.	Paris Mun. Station..	40	120	2.44	110	"
12 x 1261	69	Brant H.T Station...	Junction Pole No. 19.	40	120	.33	19	"
1261 x 62	69	Junction Pole No. 19.	" " No. 272	40	120	5.38	253	"
1262 x 1	69	" " No. 272	Brantford Mun. Stat.	40	120	.95	45	"
1262 x 2	69a	" " No. 272	L. E. & N. Rly., Brant-					
			ford.....	.....	125	.02	.....	"
702 x 33	71	Waterloo Mun. Stat..	St. Jacob's Dis. Stat.	40	120	6.28	299	13,200
733 x 34	71	St. Jacob's Dis. Stat..	Elmira "	40	120	4.62	218	"
6 x 605	72	Preston H.T. Station	Breslau	40	120	6.35	292	6,600
1 x 170	73	Niagara H.T. Station	Junct. Tower No. 118	48	250	5.01	118	46,000
170 x 61	74	Junct. Tower No. 118	" " No. 308	48	250	8.59	190	"
161 x 10	74	" " No. 308	Union Carbide Co....	48	250	1.93	49	"
161 x 1	75	" " "	Welland E. S. & M. Co.	48	250	1.20	28	"
469 x 39	76	Junction Pole No. 38 .	Dorchester Dis. Stat.	35	132	6.17	219	13,200
439 x 67	77	Dorchester Dis. Stat.	Junction Pole No. 388	35	132	4.02	132	"
467 x 6	77	Junction Pole No. 388	Thorndale Mun. Stat.	35	132	2.47	179	"
439 x 8	78	Dorchester Dis. Stat.	Thamesford "	35	132	5.88	280	"
1369 x 39	79	Junction Pole No. 381	Streetsville Dis. Stat.	45	120	.41	19	"
1339 x 67	79a	Streetsville Dis. Stat.	Junction Pole No. 27.	35	120	.53	22	4,000
1367 x 5	79a	Junction Pole No. 27.	Milton Brick Co.					
			Streetsville	35	120	.77	36	4,000
15 x 1562	81	Essex H.T. Station ..	Junction Pole No. 55.	45	120	1.10	55	26,400
1562 x 1	82	Junction Pole No. 55.	Windsor Mun. Station	45	120	2.27	103	"
1562 x 2	83	" " "	Walkerville "	40	120	1.30	62	"
14 x 1462	84	Kent H.T. Station ...	Junction Pole No. 41	40	120	.82	41	"
1462 x 1	84	Junction Pole No. 41.	Chatham Mun. Stat..	40	120	1.11	59	"

Lines—Continued

SYSTEM

No. of Cir- cuits	Power Cable, B. & S. Gauge	Telephone Wire, B. & S. & B.W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
1	2 Alum.	8 B&S C.C. Steel	1/4" Gal. Steel	Oct. 16, 1911	Mar. 8, 1912	Mar. 9, 1912
1	2 "	.....	.....	.....	.....	.....
2	4 Copper	10 B&S C.C. Steel	1/4" Gal. Steel	Dec. 1, 1911	Dec. 19, 1911	Dec. 21, 1911
1	4 "	.....	6 B.W.G. Iron	May 16, 1916	Aug. 11, 1916	Oct. 23, 1916
1	1/0 Alum.	.....	1/4" Gal. Steel	June 1, 1912	June 29, 1912	July 17, 1912
1	3/0 "	8 B&S C.C. Steel	1/4" "	June 15, "	Aug. 19, "	Sep. 7, "
1	3/0 "	8 " "	1/4" "	June 15, "	Aug. 19, "	Sep. 7, "
1	3/0 "	8 " "	1/4" "	May 10, "	Sept. 18, "	Sep. 20, "
1	2/0 Copper	.....	.....	Sept. 5, "	Sept. 18, "	Sep. 20, "
1	3/0 Alum.	8 B&S C.C. Steel	1/4" Gal. Steel	June 22, "	Sept. 18, "	Sep. 20, "
1	2 "	10 " "	1/4" "	Feb. 28, 1913	May 2, 1913	Aug. 15, 1913
1	3/0 "	8 " "	1/4" "	June 15, 1912	Sept. 18, 1912	Sep. 20, 1912
1	2 "	8 " "	1/4" "	.....	.....	.....
1	2 "	8 " "	1/4" "	.....	.....	.....
1	2 "	8 " "	1/4" "	.....	.....	.....
1	2 "	8 " "	1/4" "	Aug. 9, 1912	Oct. 11, 1912	Oct. 27, 1912
1	2 "	8 " "	1/4" "	Aug. 9, "	Oct. 11, "	Oct. 27, "
2 {	1/0 " }	8 " "	1/4" "	Aug. 19, "	Dec. 14, "	Dec. 14, "
1 {	3/0 " }	8 " "	1/4" "	Aug. 19, "	Dec. 14, "	Dec. 14, "
1	2 "	8 " "	1/4" "	Aug. 19, "	Dec. 14, "	Dec. 14, "
1	2 "	8 " "	1/4" "	May 14, 1913	May 19, 1913	Sep. 4, 1913
1	2 "	8 " "	1/4" "	Aug. 19, 1912	Dec. 14, 1912	Dec. 14, 1912
1	2 "	8 " "	1/4" "	Aug. 19, "	Dec. 14, "	Dec. 14, "
1	2 "	8 " "	1/4" "	Aug. 19, "	Dec. 14, "	Dec. 14, "
1	No. 4 DBWP Copp.	.....	.....	Nov. 20, "	Nov. 30, "	Nov. 30, "
1	3/0 Alum.	10 B&S C.C. Steel	1/4" Gal. Steel	Nov. 25, "	Mar. 13, 1913	Mar. 13, 1913
1	3/0 "	10 " "	1/4" "	Nov. 25, "	Mar. 13, "	Mar. 13, "
1	3/0 "	10 " "	1/4" "	Mar. 11, 1913	Aug. 1, "	Aug. 1, "
1	3/0 "	10 " "	1/4" "	Mar. 11, "	Aug. 1, "	Aug. 1, "
1	2 "	10 " "	1/4" "	May 6, "	July 3, "	Aug. 1, "
2	3/0 "	10 " "	1/4" "	Nov. 11, "	Jan. 2, 1914	Jan. 3, 1914
2	3/0 "	10 " "	1/4" "	Nov. 11, "	Jan. 2, "	Jan. 3, "
2	3/0 "	10 " "	1/4" "	Dec. 15, "	Jan. 17, "	Jan. 17, "
2	3/0 "	10 " "	1/4" "	Dec. 15, "	Jan. 17, "	Jan. 17, "
2	3/0 "	10 " "	1/4" "	Dec. 15, "	Jan. 17, "	Jan. 17, "
1	3/0 "	10 " "	1/4" "	.....	.....	Dec. 29, 1915
1	2 "	10 " "	1/4" "	May 17, 1913	Oct. 14, 1913	Oct. 25, 1913
1	2 "	10 " "	1/4" "	May 17, "	Oct. 14, "	Oct. 25, "
1	2 "	10 " "	1/4" "	Apr. 4, "	Dec. 23, 1913	Dec. 23, "
4	4/0 Copper	8 " "	1/4" "	Mar. 15, 1914	.....	Aug. 20, 1914
4	4/0 "	8 " "	1/4" "	Mar. 15, "	.....	Aug. 20, "
4	4/0 "	8 " "	1/4" "	Mar. 15, "	.....	Aug. 20, "
1	2/0 "	8 " "	1/4" "	July 11, "	.....	Oct. 17, 1914
1	2 Alum.	10 " "	1/4" "	Sept. 18, 1913	May 8, 1914	Jan. 27, "
1	2 "	.....	1/4" "	Oct. 10, "	Feb. 6, "	Feb. 6, "
1	2 "	.....	1/4" "	Oct. 10, "	Feb. 6, "	Feb. 6, "
1	2 "	.....	1/4" "	Oct. 13, "	Jan. 19, "	Jan. 27, "
1	2 "	10 B&S C.C. Steel	1/4" "	Nov. 1, "	Nov. 24, 1913	Nov. 24, 1913
1	6 Copper	.....	6 B.W.G. Iron	.....	.....	.....
1	6 "	.....	6 " "	.....	.....	.....
4	3/0 Alum.	10 B&S C.C. Steel	1/4" Gal. Steel	July 28, 1914	Sept. 6, 1914	Sep. 6, 1914
2	3/0 "	10 " "	1/4" "	July 31, "	Sept. 18, "	Sep. 18, "
2	3/0 "	10 " "	1/4" "	June 2, "	Aug. 1, "	Sep. 6, "
2	2/0 "	10 " "	1/4" "	Oct. 21, "	Feb. 22, 1915	Feb. 1, 1915
2	2/0 "	10 " "	1/4" "	Oct. 21, "	Feb. 22, "	Feb. 1, "

Description of
NIAGARA

New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span.	Miles	No. of Poles	Voltage
N.	L.T.			feet	feet			
563 x 64	85	Junction Pole No.118	Junction Pole No. 776	40	120	14.64	658	13,200
564 x 33	86	" " No. 776	Elora Dis. Station...	40	120	1.18	57	"
564 x 34	87	" " "	Fergus " ...	35	120	1.96	92	"
1208 x 69	88	Paris Mun. Station..	Junction Pole No. 196	35 & 40	132	1.09	49	26,400
1269 x 70	88	Junction Pole No. 196	" " No. 448	35 & 40	132	6.14	252	"
1270 x 40	89	" " No. 448	Ayr Dis. Station	35	120	1.20	56	"
1270 x 71	90	" " "	Junction Pole No. 636	35	132	4.53	188	"
1271 x 72	90	" " No. 636	" " No. 713	35	132	1.80	77	"
1272 x 41	90	" " No. 713	Drumbo Dis. Station..	35	132	.50	21	"
1241 x 13	91	Drumbo Dis. Station	Princeton	35	132	5.65	234	4,000
1241 x 74	92	" " "	Junction Pole No. 714	35	132	.49	21	"
1274 x 12	92	Junction Pole No. 714	Plattsville.....	35	132	6.84	269	"
467 x 7	93	" " No. 388	Dellers Bros	25	132	.89	42	2,200
568 x 38	94	" " No. 1005	Cheltenham	35	132	5.06	218	13,200
4 x 463	95	London H.T. Station.	Junction Pole No. 462	40	120	10.13	457	"
463 x 62	96	Junction Pole No. 462	" " No. 760	40	120	6.59	298	"
462 x 64	97	" " No. 760	" " No. 944	40	120	3.99	184	"
464 x 5	98	" " No. 944	Strathroy Mun. Stat.	40	120	9.27	425	"
470 x 72	99	" " No. 99	Junction Pole No. 757	35 & 40	132	16.18	659	"
472 x 40	99	" " No. 757	Lucan Dis. Station ..	35 & 40	132	3.00	123	"
	100	Niagara H.T. Station	Electric Developt. Co.	45	100	1.02	52	12,000
1462 x 32	101	Junction Pole No. 41.	Tilbury Dis. Station.	35	132	17.54	84	26,400
14 x 1468	102	Kent H.T. Station...	Junction Pole No. 68.	40	120	1.48	68	"
1468 x 69	103	Junction Pole No. 68.	" " No. 520	40	120	9.98	452	"
1469 x 39	104	" " No. 520	Wallaceburg Dis. Sta.	40	120	8.50	385	"
1469 x 70	105	" " "	Junction Pole No. 795	40	132	6.71	275	"
1470 x 40	105	" " No. 795	Dresden Dis. Station.	40	132	.68	33	"
1064 x 33	106	" " No. 289	Embro " "	35	132	6.04	256	13,200
1663 x 34	107	" " No. 564	Woodbridge " "	35	132	6.44	276	"
1634 x 5	108	Woodbridge Dist. Sta.	Bolton.....	35 & 40	132	12.95	540	"
1062 x 2	109	Junction Pole No. 76	W. T. & V. & I. Ry...	.....	.....	.02	2	"
1632 x 66	110	Mimico Dis. Station	Junction Pole No. 12.	30	125	.22	12	2,200
1666 x 67	110	Junction Pole No. 12	" " No. 33.	30	125	.55	21	"
1268 x 64	111	" " No. 40	" " No. 253	35 & 40	132	5.86	228	26,400
1264 x 34	112	" " No. 253	Burford Dis. Station.	35	132	3.48	142	"
1264 x 65	113	" " "	Junction Pole No. 869	35 & 40	132	15.06	616	"
1265 x 35	113a	" " No. 869	Waterford D.S.....	40	132	.09	4	"
1265 x 67	114	" " "	Junct. Pole No. 1230.	35	132	8.81	361	"
1267 x 6	114	" " No. 1230	Simcoe Mun. Station.	35	132	.06	5	"
1267 x 7	114a	" " "	L. E. & N. Ry. Simcoe	45	120	.25	11	"
1432 x 3	115	Tilbury Dis. Station	Comber.....	30	132	7.26	306	4,000
432 x 3	116	Delaware Dis. Stat...	Lambeth .....	.....	.....	6.59	.....	"
432 x 4	117	" " "	Mount Brydges .....	.....	.....	3.99	.....	"
263 x 64	118	Junction Pole No. 69.	Junction Pole No. 82.	55	120	.25	13	13,200
264 x 2	118	" " No. 82.	Dundas Mun. Station	55	120	.12	7	"
462 x 32	119	" " No. 760	Delaware Dis. Station	55	120	.09	5	"
11 x 1162	121	St. Thomas H.T. Stat.	Junction Pole No. 5..	30	132	.04	5	"
1162 x 64	121	Junction Pole No. 5 ..	" " No. 753	30	132	18.33	748	"
1164 x 34	121	" " No. 753	Dutton Dis. Station..	30	132	.16	7	"
1435 x 6	122	Ridgetown Dis. Stat.	Highgate.....	30	120	6.18	10	4,000
1468 x 65	123	Junction Pole No. 68.	Junctio. Pole No. 470	35	132	9.74	402	26,400
1465 x 67	123	" " No. 470	" " No. 676	35	132	4.78	206	"
1467 x 37	123	" " No. 676	Thamesville D.S.....	35	132	.09	6	"
1467 x 38	124	" " No. 676	Bothwell Dis. Station	35	132	9.83	407	"
8 x 832	125	Stratford H.T. Stat..	Tavistock " "	35	132	9.72	398	"
1468 x 34	126	Junction Pole No. 69.	Blenheim " "	35	132	9.52	388	"
1465 x 66	127	" " No. 470	Junction Pole No. 783	35	132	7.52	313	"
1466 x 35	127	" " No. 783	Ridgetown Dis. Stat.	35	132	.43	20	"

Lines—Continued

SYSTEM

No. of Cir- cuits	Power Cable, B. & S. Gauge	Telephone Wire, B. & S. & B.W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
1	3/0 Alum.	10 B&S C.C. Steel	1 1/4" Gal. Steel.	June 3, 1914	Oct. 17, 1914	Oct. 22, 1914
1	3/0 "	10 "	1 1/4" "	Aug. 18, "	Oct. 28, "	Oct. 22, "
1	3/0 "	10 "	1 1/4" "	Aug. 1, "	Oct. 13, "	Oct. 22, "
1	1/0 "	10 "	1 1/4" "	July 21, "	Nov. 30, "	Dec. 1, "
1	1/0 "	10 "	1 1/4" "	July 21, "	Nov. 30, "	Dec. 1, "
1	1/0 "	10 "	1 1/4" "	Sept. 15, "	Nov. 30, "	Dec. 1, "
1	1/0 "	10 "	1 1/4" "	July 13, "	Nov. 30, "	Dec. 1, "
1	1/0 "	10 "	1 1/4" "	July 13, "	Nov. 30, "	Dec. 1, "
1	1/0 "	10 "	1 1/4" "	July 13, "	Nov. 30, "	Dec. 1, "
1	No. 6 Copper	.....	1 1/4" "	Aug. 17, "	Nov. 30, "	Dec. 18, "
1	No. 4 "	.....	1 1/4" "	Aug. 17, "	Nov. 30, "	Dec. 1, "
1	No. 4 "	.....	1 1/4" "	Aug. 17, "	Nov. 30, "	Dec. 1, "
1	No. 6 "	.....	No. 8 B & S C.C. Steel as neutral	Mar. 19, "	Mar. 15, 1915	Mar. 19, 1915
1	1/0 Alum.	10 B&S C.C. Steel	1 1/4" Gal. Steel	June 10, "	June 30, 1914	July 3, 1914
1	3/0 "	10 "	1 1/4" "	Sept. 1, "	Nov. 30, "	Nov. 30, "
1	3/0 "	10 "	1 1/4" "	Oct. 15, "	Nov. 30, "	Nov. 30, "
1	3/0 "	10 "	1 1/4" "	Sept. 29, "	Nov. 30, "	Nov. 30, "
1	3/0 "	10 "	1 1/4" "	Sept. 14, "	Nov. 30, "	Nov. 30, "
2	2 S.R. "	10 BWG Gal. Iron	1 1/4" "	Oct. 23, "	Jan. 20, 1915	Jan. 21, 1915
2	2 S.R. "	10 "	1 1/4" "	Oct. 23, "	Jan. 20, "	Jan. 21, "
2	4/0 Copper	9 "	1 1/4" "	Oct. 27, 1915	Oct. 31, "	Oct. 31, "
1	2 S.R. Alum.	10 B&S C.C. Steel	1 1/4" "	Jan. 13, "	May 12, "	Mar. 3, "
3 {	2-3/0 "	10 B&S HD Copp.	1 1/4" "	Oct. 28, 1914	Feb. 3, "	Feb. 3, "
3 {	1-1/0 "					
2	3/0 "	10 "	1 1/4" "	Oct. 30, "	Feb. 3, "	Feb. 3, "
1	1/0 "	10 "	1 1/4" "	Nov. 6, "	Feb. 3, "	Feb. 3, "
2	3/0 "	10 "	1 1/4" "	Nov. 3, "	May 1, "	Mar. 30, "
2	3/0 "	10 "	1 1/4" "	Nov. 3, "	May 1, "	Mar. 30, "
1	1/4" Gal. Steel	10 B&S C.C. Steel	1 1/4" "	Oct. 1, "	Dec. 24, 1914	Dec. 22, 1914
1	1/0 Alum.	10 "	1 1/4" "	Sept. 25, "	Oct. 21, "	Dec. 2, "
1	3/0 "	10 B&S C.C. Steel	1 1/4" Gal. Steel	Oct. 20, 1914	Nov. 26, 1914	Jan. 26, 1915
1	2 "	10 "	1 1/4" "	Sept. 12, "	Sep. 12, "	Sep. 13, 1914
1	2/0 Copper	.....	1 1/4" "	Oct. 24, "	Feb. 17, 1915	Feb. 17, 1915
1	2/0 "	.....	1 1/4" "	Oct. 24, "	Feb. 17, "	Feb. 17, "
1	2 S.R. Alum.	10 B & S Copper	1 1/4" "	Nov. 6, "	May 4, "	May 6, "
1	2 "	10 B&S HD Copp.	1 1/4" "	Nov. 21, "	May 28, "	May 6, "
1	2 "	10 "	1 1/4" "	Nov. 21, "	May 5, "	May 10, "
1	2 "	10 "	1 1/4" "	Nov. 21, "	May 5, "	May 10, "
1	2 "	10 "	1 1/4" "	Nov. 26, "	May 7, "	May 9, "
1	2 "	10 "	1 1/4" "	Nov. 26, "	May 7, 1915	May 9, "
1	2 "	10 BWG Gal. Iron	1 1/4" "	.....	.....	July 14, 1916
1	2 "	.....	1 1/4" "	Jan. 14, 1915	May 8, 1915	Apr. 20, 1915
1	6 M.H.D. Copper	.....	1 1/4" "	Jan. 25, "	Mar. 12, "	Mar. 15, "
1	6 "	.....	.....	Jan. 7, "	Jan. 23, "	Mar. 1, "
2	2 Copper	10 B & S Copper	1 1/4" Gal. Steel	Feb. 25, "	Mar. 15, "	Mar. 15, "
2	2 "	10 "	1 1/4" "	Feb. 25, "	Mar. 15, "	Mar. 15, "
1	2 "	10 B&S C.C. Steel	1 1/4" "	Jan. 27, "	Mar. 9, "	Feb. 1, "
1	1/0 Alum.	.....	1 1/4" "	May 3, "	Aug. 21, "	Aug. 27, "
1	1/0 "	.....	1 1/4" "	May 3, "	Aug. 21, "	Aug. 27, "
1	1/0 "	.....	1 1/4" "	May 3, "	Aug. 21, "	Aug. 27, "
1	6 M.H.D. Copper	.....	6 B.W.G. G. Iron	Oct. 3, 1916	Nov. 4, 1916	Nov. 6, 1916
1	1/0 Alum.	9 BWG Gal. Iron	1 1/4" Gal. Steel	May 18, 1915	July 14, 1915	Sep. 14, 1915
1	1/0 "	9 "	1 1/4" "	May 18, "	July 14, "	Sep. 14, "
1	1/0 "	9 "	1 1/4" "	May 18, "	July 14, "	Sep. 14, "
1	2 S.R. Alum.	9 "	1 1/4" "	June 26, "	Aug. 17, "	Aug. 17, "
1	6 BWG Gal. Iron	9 "	6 B.W.G. G. Iron	Sept. 9, "	Sep. 5, 1916	Oct. 26, 1916
1	2 S.R. Alum.	9 "	1 1/4" Gal. Steel	July 2, "	Oct. 7, 1915	Oct. 20, 1915
1	2 "	9 "	1 1/4" "	June 24, "	Sep. 7, "	Nov. 24, "
1	2 "	9 "	1 1/4" "	June 24, "	Sept. 7, "	Nov. 24, "

Description of
NIAGARA

New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span	Miles	No. of Poles	Voltage
N.	L.T.			feet	feet			
12 x 1203	128	Brant H.T. Station ..	St. George	30	132	9.19	199	4,000
264 x 71	129	Junction Pole No. 82.	Junction Pole No. 328	35	132	5.78	245	13,200
271 x 34	129	“ “ No. 328	Lynden Dis. Station .	35	132	4.53	185	“
440 x 12	130	Lucan Dis. Station ..	Ailsa Craig	30	132	10.14	410	4,000
1470 x 71	131	Junction Pole No. 795	Junct. Pole No. 1445a	35	125	15.05	651	26,400
1471 x 43	131	“ “ No. 1445a	Petrolia Dis. Station	35	125	6.77	297	“
1443 x 75	132	Petrolia Dist. Station	Junct. Pole No. 1962.	40	125	4.89	219	“
1475 x 77	133	Junction Pole No. 1962	“ “ No. 2304	35	125	7.92	342	“
440 x 11	134	Lucan Dist. Station..	Granton	30	132	6.09	247	4,000
1477 x 17	135	Junct. Pole No. 2304.	Sarnia Mun. Station .	35	125	7.73	333	26,400
440 x 43	136	Lucan Dis. Station ..	Exeter Dis. Station..	35	132	13.24	558	13,200
1443 x 14	137	Petrolia Dis. Station.	Wyoming	25	132	7.92	26	4,000
867 x 68	138	Junction Pole No. 311	Junction Pole No. 802	35	132	11.92	491	26,400
868 x 38	139	“ “ No. 802	Milverton Dis. Stat..	35	132	.96	38	“
868 x 69	140	“ “ “	Junct. Pole No. 1314.	35	132	12.83	512	“
869 x 39	141	“ “ No. 1314	Listowel Dis. Station	35	132	2.77	120	“
869 x 70	142	“ “ “	Junct. Pole No. 1657 .	35	132	8.40	343	“
870 x 72	142	“ “ No. 1657	“ “ No. 1687 .	35	132	.78	30	“
872 x 71	142	“ “ No. 1687	“ “ No. 1726 .	35	132	.84	39	“
871 x 40	142	“ “ No. 1726	Palmerston Dis. Stat.	35	132	.42	18	“
871 x 41	143	“ “ “	Harriston “	35	132	6.12	260	“
1475 x 74	145	“ “ No. 1962	Junct. Pole No. 2058 .	35	132	2.35	96	“
1474 x 76	145	“ “ No. 2058	“ “ No. 2336.	35	132	6.85	278	“
1476 x 45	145	“ “ No. 2336	Forest Dis. Station ..	35	132	10.90	444	“
8 x 867	146	Stratford H.T.Stat..	Junction Pole No. 311	40	120	6.81	311	“
867 x 63	147	Junction Pole No. 311	“ “ No. 647	40	120	7.61	336	“
863 x 34	148	Junction Pole No. 647	Dublin Dis. Station..	40	120	5.08	224	“
834 x 65	148	Dublin Dis. Stat....	Junct. Pole No. 1153.	40	120	6.28	282	“
865 x 66	149	Junct. Pole No. 1153.	“ “ No. 1550	40	120	8.84	397	“
866 x 7	150	“ “ No. 1550	Goderich Mun. Stat.	40	120	13.61	610	“
443 x 74	151	Exeter Dis. Stat....	Junction Pole No. 51.	30	132	1.07	.....	4,000
474 x 14	151	Junction Pole No. 51.	Hensall.....	30	132	5.12	205	“
1164 x 35	153	“ “ No. 753	West Lorne Dis. Stat.	30	132	7.62	311	13,200
1135 x 6	154	West Lorne Dis. Stat.	Rodney	30	132	4.00	161	4,000
16 x 1666	155	York H.T. Station...	Junction Pole No. 122	40	125	2.59	122	26,400
1666 x 31	155	Junction Pole No. 122	Etobicoke Dis. Stat. .	40	125	.21	10	“
169 x 9	156	“ “ No. 88.	Niagara Falls Mun. Station.....	35	120	1.08	55	12,000
1476 x 46	157	“ “ No. 2336	Watford Dis. Station	35	132	10.84	443	26,400
834 x 4	158	Dublin Dis. Station ..	Dublin.....	30	150	1.26	47	4,000
474 x 75	159	Junction Pole No. 51.	Junction Pole No. 316	30	132	7.58	265	“
475 x 16	160	Sarepta Met. Stat 316	Dashwood	30	132	1.35	56	“
475 x 15	161	“ “ “	Zurich.....	30	132	5.17	211	“
166 x 69	162	Tap O.P. Line Stanley Street.....	Junction Pole No. 88.	35	100	1.53	74	12,000
169 x 67	162	Junction Pole No. 88.	“ “ No. 115	35	100	.53	27	“
167 x 73	162	“ “ No. 115	“ “ No. 147	35	100	.52	32	“
173 x 65	162	“ “ No. 147	“ “ No. 206	35	100	1.13	59	“
1363 x 3	163	“ “ No. 30.	Shale Brick Co.	55	120	1.22	59	13,200
171 x 11	164	Junct. Tower No. 330	Dunnville Mun. Stat.	35	176	21.54	672	46,000
15 x 1503	165	Essex H.T. Station ..	Canada Salt Co.	40	132	8.10	351	26,400
165 x 5	166	Junction Pole No. 206.	Stamford Twp. Stat.	35	120	.69	34	12,000
165 x 76	167	“ “ “	Junction Pole No. 52.	35	120	.40	52	“
176 x 16	168	“ “ No. 52..	Queenston Quarries..	35	120	.41	18	“
176 x 77	169	“ “ “	Junction Pole No. 72.	35	120	.44	20	“
177 x 17	170	“ “ No. 72..	Canning Co.	35	120	.08	2	“
177 x 18	171	“ “ “	St. Davids	35	120	.55	26	“
1471 x 41	172	“ “ No. 1445a	Oil Springs D.S.....	35	132	1.42	63	26,400
1471 x 42	173	“ “ “	Brigden. Dis. Station	35	132	8.88	360	“
1168 x 38	174	“ “ No. 112	Aylmer Dis. Station .	35	132	9.60	405	13,200

Lines.—Continued

SYSTEM.

No. of Cir- cuits	Power Cable, B. & S. Gauge	Telephone Wire, B. & S. & B.W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
1	2 S.R. Alum.	9 BWG Gal. Iron	1/4" Gal. Steel	July 1, 1915	Aug. 17, 1915	Aug. 17, 1915
1	2 "	9 "	1/4" "	July 24, "	Oct. 15, "	Oct. 22, "
1	2 "	9 "	1/4" "	July 24, "	Oct. 15, "	Oct. 22, "
1	2 "	.....	1/4" "	July 28, "	Dec. 11, "	Dec. 15, "
2	3/0 Alum.	9 BWG Gal. Iron	1/4" "	Aug. 30, "	Feb. 18, 1916	Apl. 6, 1916
2	3/0 "	9 "	1/4" "	Aug. 30, "	Feb. 18, "	Apr. 6, "
2	3/0 "	9 "	1/4" "	Mar. 1, 1916	Sep. 12, "	Nov. 10, "
2	3/0 "	9 "	1/4" "	Apl. 6, "	Sep. 29, "	Nov. 10, "
1	6 M.H.D. Copper	.....	6 B.W.G.G. Iron	Apl. 6, "	May 27, "	June 29, "
2	3/0 Alum.	9 BWG Gal. Iron	1/4" Gal. Steel	May 9, "	Nov. 4, "	Nov. 10, "
1	3/0 "	9 "	1/4" "	Nov. 26, 1915	May 4, "	May 4, "
1	6 M.H.D. Copper	.....	6 B.W.G.G. Iron	Sept. 1, "	Oct. 4, "	Oct. 4, "
1	1/0 S.R. Alum.	9 BWG Gal. Iron	1/4" Gal. Steel	Sept. 20, "	May 15, "	May 18, "
1	2 "	9 "	1/4" "	Oct. 15, "	May 18, "	May 18, "
1	1/0 "	9 "	1/4" "	Oct. 13, "	May 22, "	May 27, "
1	2 "	9 "	1/4" "	Oct. 28, "	May 22, "	May 27, "
1	1/0 "	9 "	1/4" "	Oct. 14, "	June 6, "	June 6, "
1	1/0 "	9 "	1/4" "	Oct. 14, "	June 6, "	June 6, "
1	1/0 "	9 "	1/4" "	Oct. 14, "	June 6, "	June 6, "
1	1/0 "	9 "	1/4" "	Oct. 14, "	June 6, "	June 6, "
1	1/0 "	9 "	1/4" "	Dec. 10, "	June 30, "	June 30, "
1	6 BWG Gal. Iron	9 "	6 B.W.G.G. Iron	June 26, "	Dec. 4, "	Feb. 7, 1917
1	6 "	9 "	6 "	June 26, "	Dec. 4, "	Feb. 7, "
1	6 "	9 "	6 "	June 26, "	Dec. 4, "	Feb. 7, "
2	3/0 Alum.	10 B&S C.C. Steel	1/4" Gal. Steel	Apl. 23, 1913	June 4, 1914	Dec. 23, 1914
2	3/0 "	10 "	1/4" "	Apl. 23, "	June 4, "	Dec. 23, "
2	3/0 "	10 "	1/4" "	Apl. 23, "	June 4, "	Dec. 23, "
2	3/0 "	10 "	1/4" "	Apl. 23, "	June 4, "	Dec. 23, "
2	3/0 "	10 "	1/4" "	Apl. 23, "	June 4, "	Dec. 23, "
2	3/0 "	10 "	1/4" "	Apl. 23, "	June 4, "	Dec. 23, "
1	6 M.H.D. Copper	.....	6 B.W.G.G. Iron	Sept. 11, 1916	Dec. 21, 1916	Dec. 21, 1916
1	6 "	.....	6 "	Sept. 11, "	Dec. 21, "	Dec. 21, "
1	6 B.W.G. Iron	.....	.....	Dec. 4, "	Jan. 19, 1917	Dec. 22, "
1	6 M.H.D. Copper	.....	6 B.W.G.G. Iron	Jan. 2, 1917	Jan. 17, "	Jan. 15, 1917
2	1/0 Copper	9 BWG Gal. Iron	9/32" Gal. Steel	Feb. 9, "	Sept. 25, 1919	Oct. 10, 1919
2	1/0 "	9 "	9/32" "	Feb. 9, "	Sept. 25, "	Oct. 10, "
2	3 "	9 "	Built by Ont. Power Co.			
1	6 BWG Gal. Iron	9 "	1/4" Gal. Steel	June 9, 1917	Aug. 5, 1917	Aug. 10, 1917
1	6 M.H.D. Copper	.....	6 B.W.G.G. Iron	June 8, "	July 7, "	Sep. 25, "
1	2 S.R. Alum.	.....	1/4" Gal. Steel	Mar. 21, "	June 13, "	Aug. 23, "
1	6 M.H.D. Copper	.....	1/4" "	Mar. 29, "	June 14, "	Aug. 23, "
1	2 S.R. Alum.	.....	1/4" "	Mar. 29, "	June 18, "	Aug. 23, "
2	345,000 C.M. Alum	12 BWG Gal. Iron	Built by Ont. Power Co.			
2	173,000 "	12 "	" "			
2	173,000 "	12 "	" "			
1	No. 4 Copper	12 "	" "			
1	2 S.R. Alum.	10 B&S C.C. Steel	1/4" Gal. Steel	Mar. 6, 1917	Apr. 22, 1917	Apr. 22, 1917
1	5/16" Gal. Steel	9 BWG Gal. Iron	1/4" "	Aug. 17, "	Mar. 31, 1918	Mar. 21, 1918
2	1/0 Copper	9 "	1/4" "	July 10, "	Oct. 12, 1917	Nov. 9, 1917
1	6 "	.....	Built by Ont. Power Co.			
1	6 "	.....	" "		
1	6 "	.....	" "		
1	6 "	.....	" "		
1	6 "	.....	" "		
1	6 "	.....	" "		
1	6 BWG Gal. Iron	9 BWG Gal. Iron	1/4" Gal. Steel	July 20, 1917	Sept. 22, 1917	Dec. 5, 1917
1	6 "	9 "	1/4" "	Aug. 1, "	Sept. 22, "	Dec. 6, "
1	1/4" Gal. Steel	9 "	1/4" "	Aug. 27, "	Oct. 27, "	Feb. 11, 1918

Description of

NIAGARA

New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span	Miles	No. of Poles	Voltage
N.	L.T.							
1 x 174	175	Niagara H.T. Station	Junct. Tower, No. 118	.....	.....	5.25	.....	46,000
174 x 14	176	Junct. Tower No. 118	St. Catharines M.S...	.....	.....	.....	.....	.....
439 x 9	177	Dorchester D.S.	Dorchester.....	30	160	2.81	91	4,000
840 x 73	178	Palmerston D.S.	Junction Pole No. 263	30	150	7.09	237	"
873 x 13	178	Junction Pole No. 263	Drayton	30	150	3.54	123	"
21 x 22	179	Erindale PowerHouse	Cooksville H.T. Stat.	35	132	3.11	128	13,200
873 x 12	180	Junction Pole No. 263	Moorefield.....	30	150	1.36	52	4,000
1367 x 70	181	" " No. 27.	Junction Pole No. 52.	25	120	.51	25	"
1370 x 7	181	" " No. 52.	Toronto Milling Co...	25	120	.72	33	"
1274 x 14	184	" " No. 714	Wolverton Mills	35	132	1.81	1	"
15 x 1564	185	Essex H.T. Station ..	Junction Pole No. 231	.....	.....	5.30	.....	26,400
1537 x 38	186	Kingsville D.S.....	Leamington D.S.....	35	160	8.40	295	4,000
1570 x 39	187	Junction Pole No. 1605	Cottam Dis. Station .	35	160	.80	22	26,400
1564 x 34	188	" " No. 231	Canard River D.S....	35	160	6.00	190	"
1534 x 65	189	Canard River D.S....	Junction Pole No. 642	35	160	7.25	220	"
1565 x 35	190	Junction Pole No. 642	Amherstburg D.S. ...	35	160	2.30	78	"
1565 x 36	191	" " No. 642	Harrow Dis. Station .	35	160	12.75	401	"
1536 x 67	192	Harrow Dis. Station.	Junct. Pole No. 1374.	35	160	9.70	334	"
1567 x 37	193	Junct. Pole No. 1374.	Kingsville D.S.....	35	160	.50	7	"
1567 x 68	194	" " " "	Junct. Pole No. 1381.	35	160	.21	7	"
1568 x 69	194	" " No. 1381	" " No. 1412	35	160	.49	31	"
1569 x 38	195	" " No. 1412	Leamington Dis. Stat.	35	160	7.50	289	"
1569 x 70	196	" " " "	Junct. Pole No. 1605.	35	160	5.20	192	"
1570 x 40	197	" " No. 1605	Essex Dis. Station...	35	160	4.70	157	"
167 x 7	198	Junction Pole	Nat. Abrasive Co. ....	.....	.....	.....	.....	.....
	199	Etobicoke Entrance	Structure.....	.....	.....	.....	.....	.....
1009 x 10	200	Tillsonburg.....	Sec. 1 Twp. of Dere-					
			ham	30	160	.72	25	4,000
1009 x 10	201	Sec. 2 in the Town	ship of Dereham	30	160	.96	32	"
1009 x 10	202	Sec. 3 in the Town	ship of Dereham	30	160	6.50	215	"
1009 x 10	203	Sec. 6 in the Town	ship of Dereham	45	160	.40	14	"
1009 x 10	204	Sec. 7 in the Town	ship of Dereham	35	160	.34	12	"
1009 x 10	205	Sec. 9 in Township	S. Dorchester-Spring-					
			field.....	30	160	3.62	120	"
	206	Tor. Milling Co.....	Milton Pressed Brick	.....	.....	.....	1	2,200
118 x 6	207	St. David's	Niagara-on-the-Lake	30	125	7.83	334	12,000
202 x 11	209	Dundas Mun. Station	Copetown.....	35	132	5.98	5	2,200
472 x 42	210	Junction Pole No. 757	Ailsa Craig Dis. Stat.	30	132	6.34	403	13,200
442 x 18	211	Ailsa Craig D.S.....	Parkhill	30	160	9.03	325	4,000
1438 x 19	212	Bothwell Dist. Stat. .	Newbury	30	160	5.93	210	"
1419 x 20	213	Newbury	Glencoe.....	30	160	5.89	199	"
1370 x 11	214	Junction Pole No. 52.	W. D. Reid & Sons,					
			Streetsville	30	132	.22	9	"
	215	Malvern	Markham	40	125	5.58	235	"
1631 x 66	216	Etobicoke Station ...	Junction Pole No. 122	.....	.....	.22	.....	2,200

RIDEAU

R.	R.L.							
1 x 2	1	High Falls Gen. Stat.	Perth Trans. Station	35	132	21.03	869	26,400
2 x 55	2	Perth Trans. Station	Junct. Pole No. 1328.	35	132	11.31	459	"
55 x 3	2	Junct. Pole No. 1328 .	Smith's Falls Station	35	132	5.64	233	"
3 x 4	3	Smith's Falls Station	Merrickville "	35	132	12.30	517	"
55 x 5	4	Junction Pole No. 1328	Carleton Place "	30	150	14.24	523	"

Lines.—Continued

SYSTEM

No. of Cir- cuits	PowerCable. B. & S. Gauge	Telephone Wire, B. & S. & B. W. G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
2	7/16" Gal. Steel.	.....	.....	Nov. 13, 1917	Dec. 11, 1917	.....
.....
1	4 Copper	.....	¾" Gal. Steel	.....	.....	.....
1	4 "	.....	6 B.W.G.G. Iron	Oct. 24, 1917	Jan. 16, 1918	Feb. 22, 1918
1	4 "	.....	6 "	Oct. 24, "	Jan. 16, "	Feb. 22, "
1	4 M.H.D. Copper	9 BWG Gal. Iron	9/32" Gal. Steel	Oct. 27, "	Nov. 22, 1917	Dec. 14, 1917
1	6 Copper	.....	6 B.W.G.G. Iron	Dec. 1, 1917	Dec. 20, "	Feb. 22, 1918
1	6 "	.....	6 "	Feb. 2, 1918	Mar. 18, 1918	Mar. 9, "
1	6 "	.....	6 "	Feb. 2, "	Mar. 18, "	Mar. 9, "
1	6 M.H.D. Copper	.....	.....	Sept. 18, 1918	Oct. 22, "	Oct. 22, "
1	2 Bare Std. Copp.	.....	.....	Sept. 24, "	Oct. 21, "	Feb. 1, 1919
1	3/0 Alum.	.....	.....	Built by Essex Power & Light Co.		
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
2	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
2	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
1	1/0 "	.....	.....	"	"	"
.....
.....
1	4 Copper	.....	¾" Gal. Steel	Nov. 23, 1916	.....	July 1, 1917
1	4 "	.....	¾" "	Nov. 23, "	.....	July 1, "
1	6 "	.....	¾" "	Nov. 23, "	.....	July 1, "
1	6 "	.....	¾" "	Nov. 23, "	.....	July 1, "
1	6 "	.....	¾" "	Nov. 23, "	.....	July 1, "
1	6 "	.....	5/16" "	Nov. 23, "	.....	July 1, "
1	6 "	.....	.....	Mar. 20, 1919	Apr. 11, 1919	Mar. 20, "
1	6 "	.....	.....	.....	.....	.....
1	6 H.D. Copper	9 BWG Gal. Iron	.....	Sept. 10, 1919	Oct. 4, 1919	Oct. 17, 1919
1	2 S.R. Alum.	6 S.R. Alum.	9/32" Gal. Steel	Nov. 12, "	June 1, 1920	May 2, 1920
1	2 "	.....	¾" "	Nov. 17, "	May 21, "	May 4, "
1	2 "	.....	9/32 "	Dec. 27, "	.....	.....
1	2 "	.....	9/32 "	Feb. 2, 1920	.....	.....
1	6 Copper	.....	¾" "	Dec. 22, 1919	Jan. 14, 1920	Jan. 14, 1920
1	2 S.R. Alum.	.....	¾" "	Dec. 27 "	.....	Apr. 1, 1920
1	2/0 Copper	.....	¾" "	.....	.....	.....

SYSTEM

1	125,000 C.M. Alum	9 BWG Gal. Iron	9/32" Gal. Steel	Aug. 22, 1918	Apr. 25, 1919	June 23, 1919
1	125,000 "	9 "	9/32" "	Apr. 12, "	Dec. 9, 1918	Feb. 18, "
1	125,000 "	9 "	9/32" "	Apr. 12, "	Dec. 9, "	Feb. 18, "
1	5/16" Gal. Steel	9 "	¾" "	Nov. 27, 1917	June 12, "	Sep. 5, 1918
1	125,000 C.M. Alum	9 "	9/32" "	May 7, 1919	Nov. 20, 1919	May 31, 1920

Description of MUSKOKA								
New Section No.	Old Sec. No.	From	To	Aver. Length of Poles	Aver. Span	Miles	No. of Poles	Voltage
M. 1 x 2	M.L. 1	South Falls Gen. Stat.	Huntsville Dis. Stat..	feet 35	feet 132	26.32	1,141	22,000
NIPISSING								
Z. 1 x 101	....	Nipissing Pwr. House	Nipissing Village	28	126	2.50	128	2,200
1 x 52	....	" "	Powassan Tap.....	34	126	3.00	137	22,000
52 x 2	....	Powassan Tap.....	Powassan.....	32	126	4.00	184	"
52 x 3	....	" " .....	Callander	34	126	7.00	318	"
3 x 4	....	Callander.....	North Bay	35	126	8.20	401	"
EUGENIA FALLS								
E. 1 x 52	EFL 1	Eugenia Gen. Station	Junction Pole No. 316	40	125	7.28	316	22,000
52 x 3	1	Junction Pole No. 316	Chatsworth Dis. Stat.	40	125	15.27	658	"
3 x 65	2	Chatsworth Dis. Stat.	Junct. Pole No. 1141a	40	125	3.92	168	"
65 x 2	2	Junct. Pole No. 1141a	Owen Sound Dis.Stat.	40	125	5.28	227	"
1 x 55	3	Eugenia Gen. Station	Junction Pole No. 297	40	125	6.78	297	"
55 x 58	4	Junction Pole No. 297	" " No. 964	40	125	15.68	666	"
58 x 57	4	" " No. 964	" " No. 971	40	125	.12	7	"
57 x 7	4	" " No. 971	Durham District Stat.	40	125	.17	14	"
57 x 56	5	" " "	Junct. Pole No. 1015 .	40	125	1.05	44	"
56 x 59	5	" " No. 1015	Junct. Pole No. 1326 .	40	125	7.21	311	"
59 x 9	5	" " No. 1326	Mount Forest Dis. Station	40	125	7.49	336	"
63 x 13	6	" " No. 1798	Grand Valley D.S....	35	132	8.98	384	"
58 x 54	7	" " No. 964	Junct. Pole No. 1491	40	125	12.11	527	"
54 x 17	8	" " No. 1491	Elmwood Dis. Station	40	125	4.99	214	"
17 x 4	8	Elmwood Dis. Station	Chesley "	40	125	6.07	259	"
55 x 5	9	Junction Pole No. 297	Dundalk "	40	125	11.44	499	"
5 x 10	10	Dundalk Dis. Station	Shelburne "	40	125	13.12	565	"
54 x 8	11	Junct. Pole No. 1491.	Hanover "	40	125	.76	33	"
1 x 101	12	Eugenia Gen. Station	Markdale.....	.....	.....	7.28	.....	4,000
1 x 102	13	" " "	Flesherton.....	.....	.....	6.78	.....	"
7 x 702	14	Durham Dis. Station	Holstein.....	30	130	2.63	96	"
65 x 15	15	Junct. Pole No. 1141a	Kilsyth Dis. Station .	40	125	4.80	206	22,000
15 x 1501	16	Kilsyth Dis. Station.	Tara	40	125	6.80	291	4,000
10 x 60	17	Shelburne D.S.....	Junct. Pole No. 1380.	30	130	.49	19	22,000
60 x 63	17	Junct. Pole No. 1380.	" " No. 1798	30	130	10.20	418	"
63 x 62	17	" " No. 1798	" " No. 1996	30	130	4.50	198	"
62 x 12	17	" " No. 1996	Orangeville Dis. Stat.	30	130	.21	13	"
10 x 1002	18	Shelburne Dis. Stat..	Horning's Mills.....	30	130	5.53	234	4,000
1 x 64	19	Eugenia Gen. Station	Junction Pole No. 187	35	125	4.04	187	22,000
64 x 11	20	Junction Pole No. 187	Collingwood D.S.	35	125	20.17	883	"
12 x 1201	21	Orangeville D.S.	Alton Foundry.....	30	132	5.75	249	4,000
13 x 1302	22	Grand Valley D.S....	Arthur	30	120	12.36	531	"
8 x 863	26	Hanover Dis. Station.	Junction Pole No. 117	30	132	2.73	117	"
863 x 3	27	Junction Pole No. 117	Carlsruhe	30	132	1.61	57	"
863 x 2	28	" " "	Neustadt.....	30	132	2.31	97	"
8 x 70	....	Hanover Dis. Station	Walkerton Junct. Pole	40	132	7.25	296	40,000
70 x 71	....	Walkerton Junc. Pole	Teeswater "	40	132	8.75	349	"
71 x 21	....	Teeswater Junc. Pole	" Dis. Stat.	35	132	7.15	281	"
71 x 74	....	" " "	Kinloss Junction Pole	35	132	5.75	220	"
74 x 25	....	Kinloss Junction Pole	Kincardine Dis. Stat.	35	132	12.75	517	"
74 x 24	....	" " "	Holyrood "	35	132	5.50	223	"
21 x 72	....	Teeswater Dis. Stat.	Wingham Junct. Pole	35	132	8.50	302	"
72 x 22	....	Wingham Junct. Pole	Wingham Dis. Stat...	35	132	4.75	170	"
24 x 2402	....	Holyrood Dis. Station	Lucknow	30	150	4.70	183	4,000
24 x 2403	....	" " "	Ripley.....	30	150	6.13	239	"

Lines.—Continued

SYSTEM

No. of Cir- cuits	Power Cables B. & S. Gauge	Telephone Wire, B. & S. & B.W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
1	2 S.R. Alum.	9 BWG Gal. Iron	1/2" Gal. Steel..	Aug. 6, 1915	Apr. 29, 1916	Aug.15, 1916

SYSTEM

1	No. 6 W.P. Copp.	.....	.....	1911	1911	1911
1	No. 2 Alum.	9 BWG Gal. Iron	5/16" Gal. Steel	Aug. 1909	Mar. 1910	Mar. 1910
1	No. 2 "	9 " "	5/16" "	Nov. 1911	Dec. 1911	Dec. 1911
1	No. 2 "	9 " "	5/16" "	Aug. 1909	Mar. 1910	Mar. 1910
1	No. 2 "	9 " "	5/16" "	Aug. "	Mar. 1910	Mar. 1910

SYSTEM

2	3/0 Alum.	9 BWG Gal. Iron	1/2" Gal. Steel..	Mar. 17, 1915	July 7, 1915	Nov.18, 1915
2	3/0 "	9 " "	1/2" "	Mar. 17, "	July 7, "	Nov.18, "
2	3/0 "	9 " "	1/2" "	Apr. 7, "	Sept.24, "	Nov.18, "
2	3/0 "	9 " "	1/2" "	Apr. 7, "	Sept.24, "	Nov.18, "
2	3/0 "	9 " "	1/2" "	Apr. 10, "	July 21, "	Nov.18, "
2	3/0 "	6 B&S S.R.Alum	1/2" "	Apr. 13, "	July 11, "	Nov.18, "
2	3/0 "	6 " "	1/2" "	Apr. 13, "	July 11, "	Nov.18, "
2	3/0 "	6 " "	1/2" "	Apr. 13, "	July 11, "	Nov.18, "
2 {	1-3/0 " }	9 BWG Gal. Iron	1/2" "	Apr. 26, "	Aug. 25, "	Nov.18, "
2 {	1-5/16" Steel }	9 " "	1/2" "	Apr. 26, "	Aug. 25, "	Nov.18, "
2 {	1-3/0" Alum. }	9 " "	1/2" "	Apr. 26, "	Aug. 25, "	Nov.18, "
2 {	1-5/16" Steel }	9 " "	1/2" "	Apr. 26, "	Aug. 25, "	Nov.18, "
1	6 M.H.D. Copper	9 " "	1/2" "	July 21, 1916	Dec. 1, 1916	Dec. 1, 1916
2 {	3/0 S.R.Alum. }	6 B&S S.R.Alum	1/2" "	Oct. 19, 1915	Aug. 19, "	June 18, "
1	3/0 Alum. }	9 BWG Gal. Iron	1/2" "	Dec. 4, "	June 10, "	June 18, "
1	3/0 "	9 " "	1/2" "	Dec. 4, "	June 10, "	June 18, "
1	1/0 "	9 " "	1/2" "	May 20, "	Aug. 14, 1915	Nov.18, 1915
1	1/0 "	9 " "	1/2" "	June 9, "	Aug. 24, "	Nov. 18, "
3 {	1-1/0 S.R.Alum. }	6 B&S S.R.Alum	1/2" "	Aug. 18, 1916	Sept.16, 1916	Sept.16, 1916
1	2 " }	.....	.....	Dec. 28, 1915	Jan. 17, "	Feb. 8, "
1	2 " }	.....	.....	June 4, "	Aug. 16, 1915	Nov.18, 1915
1	2 " }	.....	1/2" Gal. Steel	Dec. 10, 1915	Apr. 3, 1916	Apr. 3, 1916
1	6 BWG Gal. Iron	9 BWG Gal. Iron	1/2" "	Nov. 7, 1916	Jan. 31, 1917	Jan. 1, 1918
1	6 M.H.D. Copper	9 " "	1/2" "	Oct. 12, "	Jan. 19, "	Jan. 1, "
1	6 Copper	10 " "	1/2" "	Built by	Pine River	Develop. Co.
1	6 "	10 " "	.....	Built by	Pine River	Develop. Co.
1	6 "	10 " "	1/2" Gal. Steel	Built by	Pine River	Develop. Co.
1	6 "	10 " "	1/2" "	Built by	Pine River	Develop. Co.
1	6 M.H.D. Copper	.....	10 BWG G. Iron	Built by	Pine River	Develop. Co.
1	1/0 Copper	9 BWG Gal. Iron	1/2" Gal. Steel	Aug. 21, 1916	Oct. 5, 1916	Oct. 6, 1916
1	1/0 "	9 " "	1/2" "	Aug. 14, "	Oct. 5, "	Oct. 6, "
1	4 M.H.D. Copper	.....	6 BWG G. Iron	Oct. 17, "	Nov. 22, "	Nov.27, "
1	4 " "	.....	6 " "	Oct. 30, "	Feb. 19, 1917	Feb.19, 1917
1	6 " "	.....	6 " "	Nov. 1, 1917	Dec. 12, "	Dec. 12, "
1	6 " "	.....	6 " "	Sept.26, 1918	Dec. 2, 1918	Nov 17, 1918
1	6 DBWP Copper	.....	6 " "	Oct. 10, 1918	Dec. 11, "	Nov.17, "
1	1/0 S.R. Alum.	6 S.R. Alum.	5/16" Gal. Steel	May 22, 1920	Aug. 5, 1920	Dec. 19, 1920
1	1/0 "	6 " "	5/16" "	June 8, "	Aug. 20, "	Dec. 19, "
1	1/0 "	6 " "	5/16" "	May 27, "	Sept. 3, "	Dec. 19, "
1	1/0 "	6 " "	5/16" "	July 30, "	Sept.17, "	.....
1	1/0 "	6 " "	5/16" "	Aug. 11, "	Oct. 18, "	.....
1	5/16" Gal. Steel	9 BWG Gal. Iron	5/16" "	Sept. 3, "	Dec. 17, "	.....
1	1/0 S.R. Alum.	6 S.R. Alum.	5/16" "	July 9, "	Nov. 19, "	Dec. 21, 1920
1	1/0 "	6 " "	5/16" "	Oct. 14, "	Dec. 17, "	Dec. 21, "
1	2 " "	.....	1/2" "	Sept.22, "	Dec. 17, "	.....
1	2 " "	.....	1/2" "	Nov 5, "	Dec. 17, "	.....

Description of
WASDELL'S

New Sec. No.	Old Sec. No.	From	To	Aver. Length of Pole	Aver. Span	Miles.	No. of Poles	Voltage
W.	W.L			feet	feet			
1 x 54	{ 1 & 1a	Wasdell's Falls Gen. } Station	Junction Pole No. 183	40	120	3.94	183	22,000
54 x 51	1	Junction Pole No. 183	" " No. 832	40	120	14.34	649	"
51 x 56	1	" " No. 832	" " No. 1011	40	120	3.93	178	"
56 x 52	1	" " No. 1011	" " No. 1203	40	120	4.32	193	"
52 x 2	2	" " No. 1203	Beaverton Dis. Stat..	40	120	1.49	70	"
52 x 57	3	" " "	Junct. Pole No. 1408.	40	120	4.47	205	"
57 x 53	3	" " No. 1408	" " No. 1559	40	120	3.34	151	"
53 x 3	3	" " No. 1559	Cannington Dis. Stat.	40	120	1.86	86	"
2 x 202	4	Beaverton Dis. Stat..	Gamebridge .....	.....	.....	5.81	.....	4,000
202 x 3	5	Gamebridge	Brechin .....	.....	.....	3.93	.....	"
3 x 302	6	Cannington Station .	Woodville	30	120	5.15	148	"
3 x 303	7	" "	Sunderland	30	120	7.40	335	"
54 x 4	8	Junction Pole No. 183	Severn Sys., Longford	35	132	6.41	267	22,000
56 x 6	.....	" " No. 1011	Kirkfield Dis. Station	35	150	11.34	412	"
6 x 602	.....	Kirkfield Dis. Station	Kirkfield .....	.....	.....	1.01	.....	4,000

SEVERN

S.	S.L.							
8 x 56	1	Waubauskene Sw.Sta	Junction Pole No. 193	40	120	3.68	163	22,000
56 x 6	2	Junction Pole No. 193	Coldwater Dis Stat..	40	120	1.16	55	"
56 x 57	3	" " "	Junction Pole No. 903	40	120	15.86	711	22,000
57 x 7	4	" " No. 903	Elmvale Dis. Station	40	120	.42	19	"
57 x 54	5	" " "	Junct. Pole No. 1110	40	120	4.57	207	"
54 x 72	6	" " No. 1110	" " No. 1590	40	120	10.76	480	"
54 x 60	7	" " "	" " No. 1786	40	120	15.07	676	"
60 x 10	8	" " No. 1786	Stayner Dis. Station.	40	120	1.50	69	"
60 x 5	9	" " "	Collingwood D.S.	40	120	12.04	525	"
10 x 1002	10	Stayner Dis. Station.	Creemore	35	120	7.68	347	4,000
20 x 8	11	Big Chute Gen. Stat.	Waubauskene Tr.Xing	35	120	11.39	{ 504 496 }	{ 22,000
		Waubauskene Tr.Xing	" Sw. Stat.	40	120	.61	31	"
8 x 69	12	" Sw.Stat.	Junction Pole No. 188	40	100	3.59	188	"
69 x 19	13	Junction Pole No. 188	Victoria Harbor D.S.	40	120	1.52	82	"
69 x 71	14	" " "	Junction Pole No. 401	40	100	4.03	213	"
67 x 1	16	" " "	Midland Dis. Station.	40	100	5.30	272	"
1 x 2	17	Midland Dis. Station	Penetang " "	40	120	3.03	143	"
	18	Waubauskene	Waubauskene D.S. ...	.....	.....	50ft.	.....	"
71 x 67	19	Junction Pole No. 401	Junction Pole No. 431	35	100	.56	30	"
71 x 21	20	" " "	C.P.R. Elevators D.S.	35	125	1.33	58	"
72 x 22	21	" " No. 1590	Camp Borden Dis. Sta.	35	132	14.76	604	"
72 x 4	22	" " "	Barrie Dis. Station ..	40	120	1.57	64	"
20 x 9	23	Big Chute Gen. Stat..	Swift Rapids Gen.Sta.	30	120	7.50	328	"
4 x 61	24	Barrie Dis. Station ..	Junct. Pole No. 1834.	40	125	3.88	180	"
61 x 86	25	Junct. Pole No. 1834.	" " No. 2021	40	125	4.28	187	"
86 x 87	26	" " No. 2021.	" " No. 2282	40	125	5.99	261	"
87 x 35	27	" " No. 2282.	Cookstown Dis. Stat.	40	125	2.24	98	"
35 x 84	28	Cookstown D.S.	Junct. Pole No. 2701.	40	125	7.35	321	"
84 x 32	29	Junct. Pole No. 2701.	Alliston Dis. Station	40	125	1.82	86	"
84 x 83	30	" " "	Junct. Pole No. 2984.	40	125	6.30	283	"

Lines—Continued

SYSTEM

No. of Cir- cuits	Power Cable B. & S. Gauge	Telephone Wire, B. & S. & B. W.G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
2 {	1/0 Alum.	10 B&S C.C.Steel	1/4" Gal. Steel	Jan. 17, 1914	Sept.28, 1914	Sep.28, 1914
1 {	1/0 S.R.Alum.					
1	1/0 "	10 " "	1/4" "	Jan. 17, "	Sept.28, "	Sep. 28, "
1	1/0 "	10 " "	1/4" "	Jan. 17, "	Sept.28, "	Sep. 28, "
1	1/0 "	10 " "	1/4" "	Jan. 17, "	Sept.28, "	Sep 28, "
1	1/4" Gal. Steel	10 " "	1/4" "	Mar. 30, "	Sept.28, "	Sep. 28, "
1	2 S.R. Alum.	10 " "	1/4" "	Feb. 18, "	Sept.28, "	Sep. 28, "
1	1/4" Gal. Steel	10 " "	1/4" "	Feb. 18, "	Sept.28, "	Sep. 28, "
1	1/4" "	10 " "	1/4" "	Feb. 18, "	Sept.28, "	Sep. 28, "
1	1/0 Alum.	.....	.....	May 2, "	.....	Oct. 6 "
1	1/0 "	.....	.....	July 25, "	.....	Oct. 6 "
1	1/0 "	.....	1/4" Gal. Steel	May 19, "	.....	Oct. 19 "
1	1/0 "	.....	1/4" "	June 1, "	July 10, 1914	Oct. 19 "
1	1/0 "	9 BWG Gal. Iron	1/4" "	Feb. 17, 1916	May. 27, 1916	June 4, 1916
1	2 S.R. Alum.	6 S.R. Alum.	9/32" "	Feb. 10, 1920	Apr. 21, 1920	Apr.22, 1920
1	2 "	.....	.....	.....	.....	.....

SYSTEM

2	4/0 Alum.	{ 9 BWG Gal. Iron	1/4" Gal. Steel	Sep. 20, 1912	Feb. 18, 1913	Feb. 24, 1913
1	2 "	10 B&S C.C.Steel				
2	4/0 "	{ 9 BWG Gal. Iron	1/4" "	Sep. 25, "	Feb. 18, "	Feb. 24, "
1	2 "	10 B&S C.C.Steel				
2	4/0 "	{ 9 BWG Gal. Iron	1/4" "	Oct. 20, 1912	Feb. 18, "	Feb. 24, "
2	2/0 "	10 B&S C.C.Steel				
2	3/0 "	10 " "	1/4" "	Nov. 6, 1912	April 5 "	Apr. 6, "
1	2 "	10 " "	1/4" "	Oct. 23, 1912	Feb. 18, "	Feb. 24, "
2	3/0 "	10 " "	1/4" "	Jan. 24, 1913	Apr 26, "	Feb.25, "
1	1/0 "	10 " "	1/4" "	Nov. 1, 1912	Feb. 18, "	Feb. 24, "
2 {	4/0 "	.....	1/4" "	Aug. 15, 1914	Oct. 25, 1914	Oct. 21, 1914
2 {	2/0 "	9 BWG Gal. Iron				
2 {	4/0 "	12 " "	1/4" "	.....	.....	1915
2 {	2/0 "	9 " "				
2 {	1/0 "	10 B&S C.C.Steel	.....	Apr. 1, 1916	May 5, 1916	July 24, 1916
1 {	2/0 "	12 BWG Gal. Iron				
2 {	2/0 "	12 " "	.....	Mar. 7, 1916	May 5, 1916	July 24, 1916
2 {	1/0 S.R.Alum.	12 " "				
2 {	2/0 Alum.	12 " "	.....	Apr. 11, 1917	May 22, 1917	May 22, 1917
2 {	1/0 S.R.Alum.	12 " "				
2	2 Std. Copper	10 B&S C.C.Steel	1/4" Gal. Steel	June 7, 1911	July 18, 1911	July 18, 1911
1	2 Alum.	.....	.....	.....	.....	Oct. 15, 1915
2 {	2/0 "	12 BWG Gal. Iron	.....	.....	.....	.....
2 {	1/0 S.R.Alum.					
2	1/0 Alum.	9 " "	1/4" Gal. Steel	Feb. 29, 1916	Apr. 14, 1916	July 24, 1916
1	6 M.H.D. Copper	9 " "	6 BWG G. Iron	May 30, "	July 11, "	June 29, "
2	2/0 Alum.	10 B&S C.C.Steel	1/4" Gal. Steel	Nov. 6, 1912	Apr. 5, 1913	April 6, 1913
1	2 "	10 B&S Copper	5/16" "	.....	.....	.....
1	125,000 C.M. A1	9 BWG Gal. Iron	1/4" "	Sept. 13, 1917	Feb. 9, 1918	Apr. 25, 1918
1	125,000 "	9 " "	1/4" "	Oct. 6 "	Feb. 19, "	Apr. 25, "
1	125,000 "	9 " "	1/4" "	Oct. 20, "	Mar. 4, "	Apr. 25, "
1	125,000 "	9 " "	1/4" "	Nov. 8, "	Mar. 9, "	Apr. 25, "
1	125,000 "	9 " "	1/4" "	Nov. 16, "	Mar. 23, "	May 23, "
1	125,000 "	9 " "	9/32" "	Dec. 8, "	Apr. 17, "	May 23, "
1	5/16" Gal. Steel	9 " "	9/32" "	Jan. 2, 1918	May. 14, "	July 26, "

Description of

SEVERN

New Sec. No.	Old Sec. No.	From	To	Aver. Length of Pole	Aver. Span.	Miles	No. of Poles	Voltage
S.	S.L.							
83 x 34	31	Junction Pole No. 2984	Tottenham D.S.	40	125	3.61	177	22,000
83 x 33	32	“ “ “	Beeton Dis. Station ..	40	125	1.76	84	“
87 x 62	33	“ “ No. 2282	Junct. Pole No. 2451 .	40	125	3.87	169	“
62 x 37	34	“ “ No. 2451	Bradford Dis. Station	40	125	7.25	319	“
86 x 36	35	“ “ No. 2021	Thornton “	40	125	1.85	81	“

THUNDER BAY

P.								
1 x 2	....	Nipigon Gen. Station	Pt.Arthur Trans. Sta.	.....	.....	5.11	.....	.....
5 x 2	....	Kaminist. Power Co.	“ “	.....	.....	4.00	.....	22,000
54 x 2	....	Port Arthur Easterly Limits.....	“ “	.....	.....	.35	.....	110,000
1 x 51	....	Nipigon Gen. Station	Everard	45	330	19.23	313	“
51 x 52	....	Everard	Pearl.....	45	330	22.22	356	“
52 x 53	....	Pearl	Intersection C. N. Ry.	45	330	9.05	147	“
53 x 54	....	Intersection C.N.Ry..	Port Arthur E. Limits	45	330	18.51	301	“
2 x 261	....	Pt.Arthur Trans. Sta.	Lyon Av. & Duluth Rd.	.....	.....	.....	.....	.....
261 x 31	....	Lyon Av. & Duluth Rd	Port Arthur Dis. Stat.	.....	.....	.....	.....	.....
56 x 50	....	Nipigon Pulp & Paper Co.	Sprucewood Jct. Pole	45	325	6.25	.....	110,000

ST. LAWRENCE

L.	St.L.							
53 x 52	1a	Junction Pole No. 1..	Junct. Pole No. 363½	40	120	7.63	363	26,400
52 x 2	1a	Irq. Trans. Station	“ “	.....	.....	.....	.....	.....
		Junct. Pole No. 363½	Prescott Dis. Stat. ..	40	120	15.33	721	“
54 x 53	2 & 8	Junction Pole No. 94.	Junct. Pole No. 1 (Morrisburg)	40	120	1.96	94	“
54 x 57	2	“ “ “	Junction Pole No. 298	40	120	4.61	204	“
57 x 4	2	“ “ No. 298	Winchester Dis. Stat.	40	120	9.78	449	“
4 x 5	3	Winchester Dis. Stat.	Chesterville “	40	120	6.71	303	“
2 x 3	5	Prescott Dis. Station	Brockville “	40	120	14.08	630	“
7 x 701	6	Morrisburg Met. Stat.	Williamsburg .....	.....	.....	6.57	.....	4,000
1 x 51	8	Cornwall Power Stat.	Switch Pole No. 391..	40	176	12.63	391	46,000
51 x 54	8	Switch Pole No. 391.	Junction Pole No. 94	40	176	12.76	340	“
1 x 6	12	Cornwall Power Stat.	Toronto Paper Co..Ld.	40	176	2.57	88	“
13	13	Brockville Dis. Stat..	St. Mary's College ...	30	160	2.48	92	2,300
1 x 66	....	Cornwall Power Stat.	Grant Corners, Junct. Pole No. 143	45	325	8.06	143	44,000
66 x 13	....	Grant Corners, Junct. Pole No. 143	Martintown Dis. Sta..	45	325	4.79	80	“
13 x 14	....	Martintown Dis. Stat.	Apple Hill Junct. Pole	45	325	5.16	87	“
			Dominionville Junct.	.....	.....	.....	.....	.....
14 x 67	....	Apple Hill Junct. Pole	Pole No. 348	45	325	2.18	38	“
67 x 15	....	Dom. Jct. Pole No. 348	Alexandria Dis. Stat.	45	325	8.80	161	“
67 x 17	....	“ “ “	Maxville Dis. Stat. ..	45	325	5.16	94	“

CENTRAL ONTARIO

C.								
43 x 4302	C.O.S. 1607	Napanee.....	Newburg.....	30	132	7.91	.....	4,000
14 x 64	C.O.L. 49	Healey Falls..	Trenton	40	176	30.53	975	44,000
64 x 53								
53 x 3								
43 x 44	C.O.L. 50	Napanee.....	Kingston.....	40	175	26.50	863	“
96 x 45	C.O.L. 51	Trenton.....	Wellington	40	176	17.62	565	“
45 x 46	C.O.L. 52	Wellington ...	Picton	40	176	10.80	345	“
14 x 31	.....	Healey Falls..	Norwood	40 & 45	300	10.44	174	“
31 x 19	.....	Norwood	Peterborough.....	40 & 45	300	17.89	301	“
14 x 1401	.....	Healey Falls..	Ont. Rock Co.....	30	150	6.01	222	6,600
18 x 1832	.....	Auburn Stat. .	Lakefield.....	30	150	7.92	290	“

Lines—Continued

SYSTEM

No. of Cir- cuits	Power Cable B. & S. Gauge	Telephone Wire, B. & S. & B. W. G. Gauge	Ground Cable	Work Commenced	Work Completed	In Operation
1	5/16" Gal. Steel	9 BWG Gal. Iron	9/32" Gal. Steel	Jan. 30, 1918	May 22, 1918	Sep. 9, 1918
1	5/16" "	9 " "	9/32" "	Feb. 28, "	May 28, "	July 26, "
1	5/16" "	9 " "	9/32" "	May 29, "	July 3, "	Sep. 16, "
1	5/16" "	9 " "	9/32" "	Mar. 19, "	July 3, "	Sep. 16, "
1	5/16" "	9 " "	9/32" "	June 15, "	July 1, "	Oct. 16, "

SYSTEM

2	3/0 Alum.					
1	4/0 S.R. Alum.	3 x 13 Gal. Steel	9/32" Gal. Steel	Nov. 4, 1920	Dec. 24, 1920	Dec. 20, 1920
1	4/0 "	3 x 13 "	9/32" "	Dec. 17, 1919	Dec. 17, "	Dec. 20, "
1	4/0 "	3 x 13 "	9/32" "	Mar. 1, "	Dec. 17, "	Dec. 20, "
1	4/0 "	3 x 13 "	9/32" "	Oct. 27, "	June 11, "	Dec. 20, "
1	4/0 "	3 x 13 "	9/32" "	May 3, "	July 8, "	Dec. 20, "
1	4/0 S.R. Alum.	3 x 13 Gal. Steel	9/32" Gal. Steel	Nov. 20, 1920		

SYSTEM

1	3/0 Alum.	10 B&S C.C. Steel	1" Gal. Steel..	Oct. 29, 1912	June 14, 1913	Oct. 23, 191
1	3/0 "	10 " "	1" "	Oct. 29, "	June 14, "	Oct. 23, "
1	5/16" Gal. Steel	10 " "	1" "	June 4, "	Dec. 15, "	Dec. 18, "
1	5/16" "	10 " "	1" "	June 4, "	Dec. 15, "	Dec. 18, "
1	5/16" "	10 " "	1" "	June 4, "	Dec. 15, "	Dec. 18, "
1	3/0 Alum.	10 " "	1" "	Sep. 6, 1913	Feb. 17, 1914	Feb. 7, 1914
1	3/0 "	10 " "	1" "	Oct. 16, 1914	Mar. 20, 1915	Apr. 4, 1915
1	6 M.H.D. Copper			Feb. 22, 1915	Mar. 20, 1915	Mar. 20, "
1	3/0 Alum	9 BWG Gal. Iron	9/32" Gal. Steel	May 7, 1918	Feb. 23, 1919	Apr. 30, 1919
1	3/0 "	9 " "	9/32" "	May 7, 1918	Feb. 23, "	Apr. 30, "
1	336,000 C. M. S.R. Alum.	9 " "	9/32" "	Sep. 24, "	May 5, "	Jun. 19, "
1	2 "			June 29, 1920	Oct. 20, "	Oct. 20, 1920
1	2 "	3 x 12 Gal. Steel	9/32" Gal. Steel	June 2 "	Dec. 31, 1920	
1	2 "	3 x 12 "	9/32" "	June 4 "		
1	2 "	3 x 12 "	9/32" "	July 15, "		
1	2 "	3 x 12 "	9/32" "	Aug. 11 "		
1	2 "	3 x 12 "	9/32" "	Aug. 12, "		
1	2 "		5/16" "	Oct. 8 "		

SYSTEM

1	2 Copper		6 B.W.G. Iron	Nov. 23, 1916	Apl. 26, 1917	Apr. 23, 1917
1	2/0 "	10 B&S C.C. Steel	1" Gal. Steel	June 9, 1917	May 12, 1918	Jan. 22, 1918
1	1/0 "	9 B.W.G. Iron	1" "	Jan. 11, 1917	Nov. 7, 1917	Dec. 2, 1917
1	9/32" Gal. Steel	9 " "	9/32 " "	July 4, 1918	Feb. 15, 1919	Mar. 6, 1919
1	9/32" "	9 " "	9/32 " "	July 24, "	Feb. 12, "	Mar. 6 "
1	4/0 S.R. Alum.	3 x 13 Gal. Steel	9/32 " "	June 24, 1919	Apr. 2, 1920	May 30, 1920
1	4/0 "	3 x 13 "	9/32 " "	Sept. 17, "	Apr. 17, "	May 30, "
1	2 "		9/32 " "	Apr. 9, 1920	July 8, "	July 19, "
1	2 "		9/32 " "	Apr. 22, "	July 2, "	July 19, "

SECTION III

OPERATION OF THE SYSTEMS

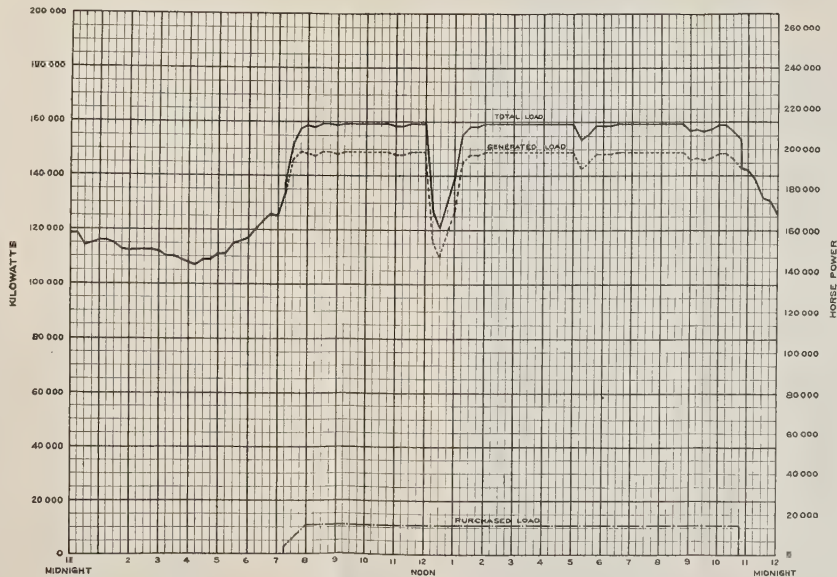
Ontario Power Company, 1919-1920

The operation of the Ontario Power Company, for the year ending October 31st, 1920, has not been marked by any unusual occurrences and no new construction of importance has been carried out. The completion of the plant last year brought its maximum capacity up to approximately 150,000 k.w., which with improved equipment and safer operating conditions, due to minor changes in apparatus, connections and layout, has made it feasible to give service to customers as nearly perfect as is commercially possible.

The unusually severe winter of 1919-20 did not interfere seriously with the operation of the plant, which, except for one or two days maintained an output only slightly less than normal, although ice conditions were unusually severe from the middle of December until the middle of May. There was no serious damage to equipment on account of the ice and the minor repairs necessary were attended to quickly with little or no interference to service.

In view of the widespread misunderstanding of the situation, by the public in general, it may be in order to outline briefly the reasons and circumstances under which ice in the river interferes with production of power. Ice starts to form in Lake Erie early in December, in the average winter and soon after begins to discharge through the Niagara River. Some ice also forms in the river, particularly along the shores, where on account of the shallow water, it picks up stones and other debris, which if taken into the power plants may damage the water turbines more or less seriously. A sudden change in temperature fills the water with slush or needle ice which, when it strikes the diverters intended to keep ice out of the plant, freezes into a solid mass and gradually blocks the openings through which the water flows. The blockage that results drops the head on the plant and is the cause of some decrease in output. This class of ice trouble is seldom serious, as the water passages are easily cleaned by dynamiting the ice with light charges. However, the presence of slush ice makes it impossible to use the racks ordinarily intended to prevent floating rubbish coming into the water wheels. The racks have to be removed at the first appearance of this ice in the river and the plant is, therefore, obliged to run without their protection for the remainder of the season. The slush ice carried into the plant passes through the turbines quite easily, and of itself is not dangerous, and probably accounts for only a slight decrease in efficiency, and a little lower output than with clear water. However, the heavier lake ice is too bulky to be discharged through the restricted passages of the turbines, and if once taken in, fills the turbines completely so that in a very short time their output is reduced to zero. When this condition obtains, the only practical solution is to allow the machine to continue to run as a synchronous motor, in case there is not enough water getting through to supply the friction losses, leave the turbine gates wide open and allow the water to gradually wear the ice away.

The Commission's supply of power is obtained partly from the Canadian Niagara Power Company, which, on account of its unfavorable location on the river,



**TYPICAL DAILY LOAD CURVES
THE ONTARIO POWER COMPANY
NOVEMBER 1919**

is more subject to ice trouble than the Ontario Power Company's plant. Most of the power shortage caused by ice last winter was occasioned by ice blocking the machines at this plant. No expense, however, has been spared by the Canadian Niagara Power Company in attempts to eliminate or minimize this trouble, although their efforts have not yet been as successful as might be desired. The Ontario Power Company suffers chiefly from ice trouble when strong east winds are blowing which drive the ice fields to the west shore of the river and into the head works of the plant. On account of the formation of the river and the physical arrangement of the water inlets, it is impossible to keep all the ice out and a quantity, varying with the amount of ice in the river and the intensity of the wind, is bound to find its way into the water wheels.

The flow of ice in the river continues until the middle of May, due to the presence of large ice fields in Lake Erie, which, when driven to the east end of the lake by the prevailing winds, pass down the river and with unfavourable conditions may cause trouble in the generating station at a time when spring is well advanced. This was the case last year when large fields of lake ice did not break up until the middle of May, thus causing trouble for a short time in the plant at that late date.

While it is impossible to prevent ice troubles in the plants now constructed, due to the relation of the water inlet works to the river and on account of conditions which cannot now be changed, the same difficulties will not occur in the case of the new Queenston plant, which is being provided with the most modern means for keeping ice out of the canal, so that it can be confidently expected that with the completion of this plant no more serious trouble with river ice will arise. A great deal of study has been given this subject, and after elaborate experiments an arrangement of the water intake was designed which, it is fully expected, will eliminate the ice troubles to which the existing plants are subjected.

While no extensive alterations or additions were made to the power house and generating apparatus, a large number of improvements, not of great importance alone, but in the aggregate of real value to the plant, have been carried out. All the turbines and auxiliary equipment were overhauled and restored to their original efficiency. The runners on No. 12 turbine, replaced last year by castings supplied during the hurried production of war years, were not found entirely satisfactory, as, in fact, had been anticipated, and one of these was replaced. Other extensive repairs were made to this turbine to reduce the clearances and improve its efficiency.

An electric welding set has made it possible to reclaim defective runners and thus materially lengthen their life. The value of these runners fully warrants the expense incurred, even though the repaired runners should have a relatively short life, which is contrary to expectations.

The work started last year on rebuilding the operating mechanism of the nine-foot gate valves on Units 7 to 12 has been continued, and is now completed. All of these valves have been provided with rising stem operating mechanisms, the design of which has shown itself to be an unqualified success in operation. The old mechanisms had reached the limit of their useful life and were no longer reliable. In addition to rebuilding these valves, all the equipment in the valve chamber was repainted.

Work has been started on reconstructing the Voith relief valves for the Units 1 to 10. The present valves are nearly worn out, and as they are of an obsolete type, it was decided to rebuild them in accordance with designs of the Commission's Engineers, to meet the requirements of modern practice. It is expected

that their reliability of operation will be considerably improved by the changes contemplated.

All the exciter sets have been overhauled and restored to first-class condition. Guards have been provided over the exposed fans on these units which were a source of danger to workmen.

Improvements to the ventilation of the power-house were made, which have materially reduced the maximum temperatures prevailing during the hot weather. These changes consist largely in alterations to the existing system of cooling, so as to better its efficiency, and were carried out at very small expense, particularly in view of the excellent results obtained.

Changes have been made in the method of ventilation for the generators, with a view to eliminating the chance of destruction of the machines due to internal fires. Recent experiences have shown that the generally accepted schemes of forced air ventilation for large semi-enclosed and totally enclosed generators were undesirable in view of the added risk to the machines from fire. Careful experiments were made, from which it was conclusively shown that such a method of ventilation was no better than the simpler and very much safer ideas that were under consideration and which were then adopted.

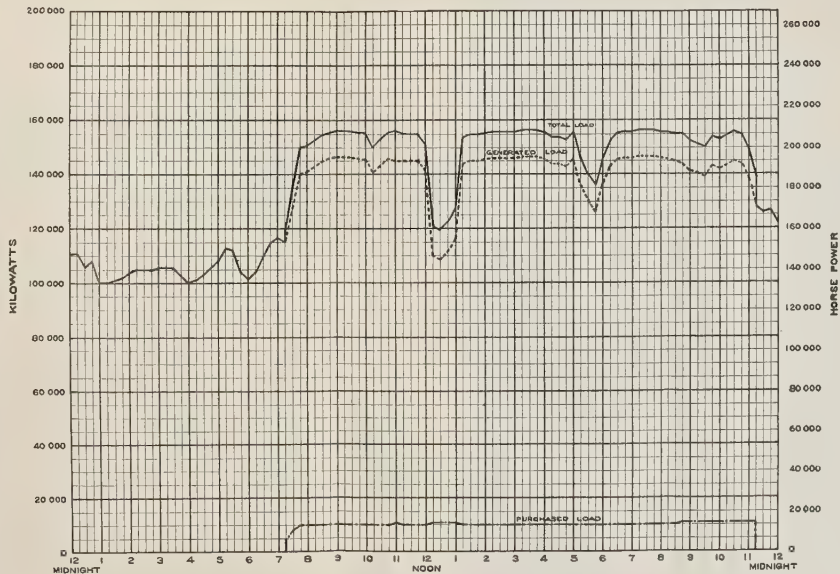
No changes of any consequence were made in the grouping of machines on the different busses, but some temporary work erected during the war was done away with and permanent connections installed.

Relay systems and metering equipment have not been changed to any extent, although minor improvements have been made. New type graphic ammeters have been installed on the different generators, to replace those of older designs which failed in service. The older types are still being maintained on some units, but will be replaced as soon as it is convenient to do so.

The step-up transformers used for supplying 60,000 volt power were overhauled and, where time permitted, extra bracings added to lessen chance of failure of the transformers on short circuit. This work is not entirely completed, but is being proceeded with whenever it is possible to get these units out of service.

The 60,000-volt line entrance structure and lightning arresters were completely reconstructed to replace the old equipment which, due to wear and tear, was no longer in safe operating condition. These changes were successfully carried out without interrupting the supply of power to the customers fed from the 60,000-volt lines.

No new lines were built by the Ontario Power Company during the past year. All lines were overhauled and necessary repairs made. In a few instances improvements in the way of more flexible switching arrangements were made. A connection was constructed by which power supplied to the Hydro-Electric Power Commission from the Canadian Niagara Power Company is transmitted to the Commission's Niagara Station through the Ontario Power Company's lines and Distributing Station. This connection was erected as a temporary expedient to relieve the shortage of power in the quickest possible time, and is not marked by any special features. Reactances were installed at the Ontario Power Company's end of this line to limit short circuit current.



**TYPICAL DAILY LOAD CURVES
THE ONTARIO POWER COMPANY
OCTOBER 1920**

TABLE No. 1.—SUMMARY OF POWER GENERATED
THE ONTARIO POWER COMPANY OF NIAGARA FALLS, 1919-20

Month	Max. Gen. Load, K.W.	K.W. Hrs. Generated	K.W. Hrs. Sold in Canada	K.W. Hrs. Exported	Average Gen. Load K.W.	Load Factor per cent.
November, 1919.....	152,000	89,419,900	62,786,300	26,633,600	124,200	81.7
December, 1919	152,000	94,857,000	66,276,200	28,580,800	127,500	83.8
January, 1920	149,300	94,903,300	64,304,000	30,599,300	127,600	85.4
February.....	147,400	82,798,900	53,088,300	29,710,600	119,000	80.7
March	147,000	86,607,000	55,480,100	31,126,900	116,400	79.2
April.....	144,000	80,350,300	53,606,700	26,743,600	111,600	77.5
May	148,300	82,129,100	52,672,400	29,456,700	110,400	74.5
June	148,000	80,543,700	50,565,400	29,978,300	111,900	75.5
July	147,800	78,657,200	49,267,300	29,389,900	105,700	71.5
August.....	148,000	82,139,300	52,231,600	29,907,700	110,400	74.5
September	149,000	82,967,500	54,512,900	28,454,600	115,200	77.4
October	149,500	90,838,300	61,042,200	29,796,100	122,100	81.6
Total .....	.....	1,026,211,500	675,833,400	350,378,100	116,800	.....

The maximum generated loads are momentary peaks. The load factor is the average load divided by the maximum momentary peak and multiplied by 100.

TABLE No. 2.—SUMMARY OF GENERATION AND DISTRIBUTION
ONTARIO POWER COMPANY OF NIAGARA FALLS, 1919-1920

Month	Max. Output O.P. Co., H.P.	Max. Purch. Power, H.P.	Max. Total, Combined Output, H.P.	K.W. Hrs. Gen. O.P. Co.	K.W. Hrs. Purchased	K.W. Hrs. Sold
November, 1919..	201,472	15,147	215,552	89,419,900	4,048,100	93,468,000
December, 1919...	201,472	14,879	216,222	94,857,000	4,760,500	99,617,500
January, 1920....	197,452	14,745	213,137	94,903,300	5,576,600	100,479,900
February	195,040	15,416	208,842	82,798,900	4,607,700	87,406,600
March.....	194,370	15,416	208,847	86,607,000	4,995,500	91,602,500
April.....	190,350	15,282	201,874	80,350,300	4,662,000	85,012,300
May.....	195,040	15,818	209,378	82,129,100	4,105,700	86,234,800
June	196,380	15,550	211,532	80,543,700	4,555,300	85,099,000
July.....	196,380	15,282	210,456	78,657,200	5,775,600	84,432,800
August	197,050	15,416	211,528	82,139,300	4,577,100	86,716,400
September.....	197,721	15,147	212,466	82,967,500	4,854,200	87,821,700
October	199,730	15,818	212,872	90,838,300	2,802,500	93,640,800
Totals.....	.....	.....	.....	1,026,211,500	55,320,800	1,081,532,300

Niagara System, 1919-1920

The operation of the Commission's Niagara System, consisting of 16 high tension stations, 121 distributing and metering stations, 99 customers' stations, 1,054 pole miles of low tension feeders, 449 pole miles of telephone lines and 466 tower miles of high tension lines, was for the past year most encouraging. During practically the entire period the power shortage was very acute, and the difficulties encountered in keeping the system operating under such conditions most severe. It was necessary to place restrictions on all customers during the entire year, and it reflects very creditably on the co-operative spirit between the

Commission and its customers that the service supplied was of such high order. With a view to alleviating, to some extent, the power shortage, the Commission arranged to purchase from the Canadian-Niagara Power Company the output of one of their machines of approximately 9,000 h.p. capacity. This machine, which was connected to our service on January 1, 1920, bettered conditions for a short time until the normal increase in the customers' loads made itself felt, with the result that the shortage problem remains as serious as earlier in the year. The power shortage was greatly intensified, due to Toronto Power Company removing from our service on October 15th one of their machines of approximately 13,000 h.p., the lease for which expired on that date. Previous to this time the Commission, realizing the seriousness of losing a block of power of this magnitude, had opened negotiations with the Toronto Power Company for the renewal of the contract, but were unable to make satisfactory arrangements. However, it is fully expected such arrangements will be completed at an early date.

The power supplied from the Ontario Power Company was most satisfactory, and with the exception of an exceedingly short time, continuous. The ice conditions on the Niagara River during the winter of 1919-1920 were the most severe experienced in many years; nevertheless, the output of the plant was maintained at practically normal.

The supply from Canadian Niagara Power Company of 50,000 h.p. to our Niagara High Tension Station was, with the exception of a period covered by ice troubles, very satisfactory. During the ice trouble period, however, the Canadian Niagara Power Company plant was greatly affected, and in some instances our supply was reduced to one-quarter of normal. With the exception of the month of March, the ice trouble period extended from December 17th, 1919, to May 13th, 1920, and during all this time our normal supply was more or less affected, and in consequence the supply to customers on the High Tension System correspondingly affected. The rapidly changing conditions at the Canadian Niagara Power Company's plant worked considerable hardship on the Niagara System, in that it was impossible to predict with any degree of certainty an hour in advance the amount of power we would receive, and consequently the customers could not be advised of their available supply.

Two very severe storms were experienced during the year, the first, occurring on November 29th, 1919, was general and caused considerable damage over the entire country. However, with a few exceptions, the Commission's lines and equipment came through in good condition, and the only inconvenience experienced was caused by short interruptions to low tension feeders, due to branches and trees being blown across the circuits. No trouble of any consequence was experienced on the high tension tower lines during this very severe storm. The second, occurring on July 23rd, 1920, was most severe in the district between Dundas and Niagara, and although some damage was occasioned, four towers being blown over and completely wrecked in one of the tower lines near Smithville, there was no total interruption to the service on the system, and temporary repairs had been made and the lines restored to service within twenty-four hours. The period during which lightning disturbances were reported from our different high-tension stations extended from March 16th to October 24th, and totalled 43 storms in all, three of which were general, passing over the entire system. The apparatus installed to relieve the system of excessive surges set up due to lightning disturbances proved most effective, in that no system interruption occurred from this cause.

During the year the capacity of a number of stations was increased as follows: At Niagara Station one bank of 3,500 k.v.a. transformers was connected to the 110,000-volt bus; at London one bank of 2,500 k.v.a. transformers replaced one bank of 1,250 k.v.a. transformers; at Woodstock one bank of 1,250 k.v.a. transformers replaced one bank of 750 k.v.a. transformers; at Brant one bank of 2,500 k.v.a. transformers replaced one bank of 1,250 k.v.a. transformers; while at Kent one bank of 1,250 k.v.a. transformers replaced the temporary bank of 750 k.v.a. transformers. At the Elmira Distributing Station the capacity was increased to 450 k.v.a. from 225 k.v.a., at Listowel to 600 k.v.a. from 300 k.v.a., and at Norwich to 225 k.v.a. from 150 k.v.a. The Ailsa Craig load was removed from the Lucan Station transformers and connected to a bank of 75 k.v.a. transformers in the Ailsa Craig Station, which was completed during the year.

The Line Maintenance Field Force made their annual test of all insulator units on the high-tension lines, and any which were below standard were removed and replaced with good units. The benefit derived from such procedure is shown in a most marked manner in that no system interruptions, due to line insulators failing, have occurred for a number of years. The usual routine of maintaining the high-tension lines, the numerous low-tension feeders and telephone lines is handled by this force, and these men are always available to assist any customer should they request aid. In addition to the above regular work, our line staff, during the year, completed the restringing of the high-tension section between Kitchener and Stratford, replacing the iron conductor with 6/0 steel reinforced aluminum conductor. The operating conditions in the Stratford and St. Mary's districts were considerably improved by this change. During the war we found it necessary to increase the carrying capacity of some of our trunk feeders, and since it was impossible to secure aluminum from the manufacturer, we were forced to secure same elsewhere. At this time the aluminum conductor on the 4,000-volt feeder, between Tilbury and Comber, was replaced with an iron line; however, due to the increasing power demand at Comber during the past year, it was necessary to take down the iron conductor and replace it with No. 2 steel reinforced aluminum.

The necessity for additional private telephone lines between the Commission's Head Office at Toronto and the Dundas Switching Station has been very keenly felt for some time, and after considerable investigation it was decided to introduce a transposing scheme of the present four physical circuits, so as to obtain in addition two phantom circuits, which are distinct talking circuits. The cost of obtaining the necessary extra talking circuits in the above manner was very much less than that of erecting two additional physical circuits, and the results obtained since the completion of this work show clearly that we were well advised in handling same in the manner stated. The engineering details were handled by the Operating Department's Telephone Engineer, and the field work by the line maintenance section of the Operating Department.

Outdoor 110,000-volt switching structures were erected at our Brant and Woodstock High-Tension Stations, tapping the through line from Dundas to London at these points, and having the necessary switches for sectionalizing the line for maintenance and operating purposes. The increased flexibility in the operation of the high-tension line between Dundas and London and the benefits derived by reason of same during insulator testing periods much more than compensates the expense in erecting such structures. In connection with the double circuiting during the coming year of the high-tension line between Dundas and Kitchener,

it has been decided to erect similar switching structures at our Preston and Guelph Stations.

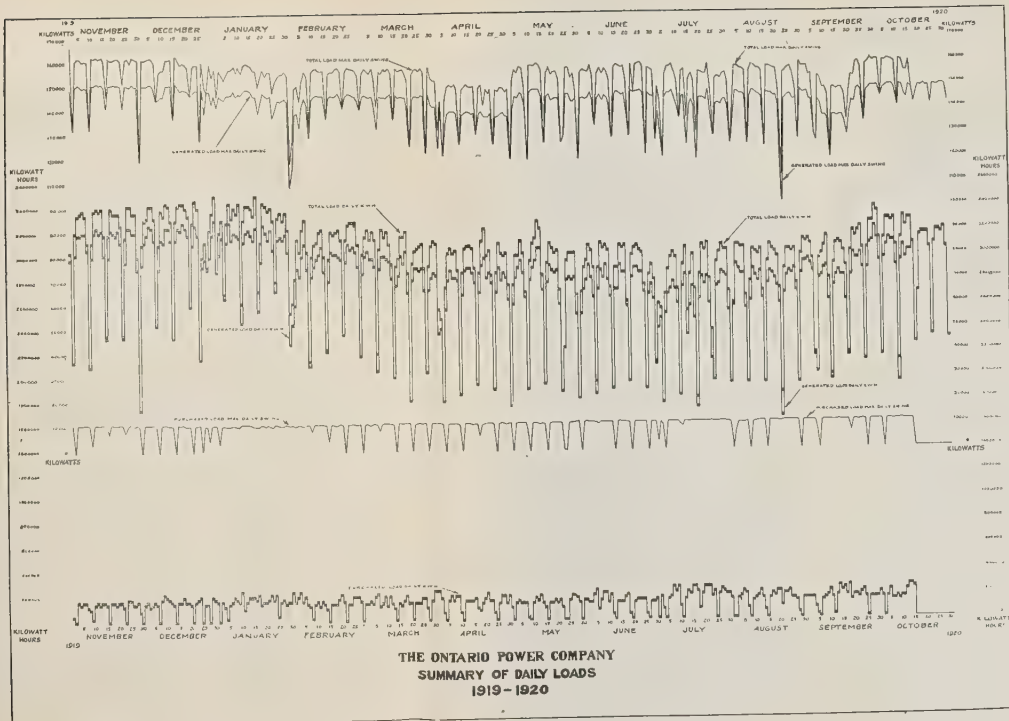
The Commission maintains, in connection with its Operating Department, a Station Maintenance Field Staff, whose routine duties consist of maintaining in operating condition the equipment in all the high-tension and distributing stations. Municipalities and customers frequently call on the Commission for assistance in repairing and overhauling their equipment, and the service of this staff is at their disposal at all times. The rebuilding and returning to service of transformers which may fail from any cause whatsoever is handled by this staff with greater dispatch and more economically than could be obtained by returning the defective units to the manufacturer for repairs. Additional bracing was added to a number of the smaller transformers, in order to strengthen the winding and make the transformer less susceptible to damage, due to the heavy mechanical strains imposed during trouble.

The two 4,000 k.v.a. condensers which had been installed at Toronto Station some time ago, and which were purchased second-hand, developed trouble due to defective insulation on the windings, and it was considered advisable to completely rewind them, and they were, therefore, forwarded to the Canadian General Electric Company's factory at Peterboro, the iron repunched, new coils manufactured, increasing the capacity to 5,000 k.v.a. One of these machines has been returned and reinstalled during the past year, and it is expected that the other will be ready for service in the near future. These machines are of considerable importance in improving the voltage on the high-tension system, and more especially at Toronto, and in relieving the generating equipment at Niagara Falls of a heavy current overload by improving the low-power factor conditions on the system.

The Meter Section of the Operating Department by systematic inspection has maintained the various station metering equipments at a high degree of accuracy. The relay protective devices which also come under the care of the Meter Section have been given routine checks, and careful studies of relay problems have been made, with a view to improving service wherever possible.

In addition to the above the Meter Section has been called upon to make many initial inspections of new installations, and the services of this department have been requisitioned frequently by municipal systems and others for various inspections and special tests.

The Operating Department's Meter Repair Shop, which is located in the Toronto Service Building, and which is operated under the supervision of the Meter Section, has been of great service, not only in making rapid repairs, but in the production of special apparatus.



Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Acton	173	193	20
Ailsa Craig	103.2	128.6	25.6
Aylmer	156.8	172	15.2
Ayr	41.5	77.2	35.5
Baden	152.3	175.6	23.3
Beachville	183.6	223	39.6
Blenheim	123.3	134	10.7
Bolton	130.6	105.9	—
Bothwell	119.7	120.6	.9
Brampton	848.5	965	116.5
Brantford	3,056.4	4,162	1,105.6
Brigden	93.8	107.1	13.3
Burford	54.7	37.8	—
Burgessville	29	42.4	13.4
Caledonia	58.3	83	24.7
Chatham	1,340.5	2,151.5	811
Clinton	168.3	154	14.3
Comber	26.8	135.4	108.2
Cooksville	63.6	—	—
Dixie			
Dashwood	49.6	52.6	3
Delaware	9.7	11.7	2
Dorchester	24.3	89.8	65.5
Drayton	44.2	48.2	4
Dresden	250.6	196.3	—
Drumbo	16	21	5
Dublin	22.5	45.3	22.8
Dundas	1,091.3	1,132.7	41.4
Dunnville	248	241.3	—
Dutton	101.8	107.2	5.4
Elmira	185	213	28
Elora	219.8	194.3	—
Embro	44.2	58.4	14.2
Essex County	911.5	1,126	214.5
Etobicoke Township	236	335	99
Exeter	148.7	175.6	26.9
Fergus	147.7	185	37.3
Forest	118	116	—
Galt	2,634	2,931.5	297.5
Georgetown	421	524	103
Goderich	362	496	134
Granton	39.5	67.7	28.2
Grantham Township	29.5	26	—
Guelph	3,255	3,638	383
Guelph Military Hospital	179.6	160.8	—
Guelph O. A. College	166.2	147.4	—
Hagersville	242.6	260	17.4
Hamilton	14,937	17,895	2,958
Harriston	122	227.8	105.8
Hensall	50	85.7	35.7
Hespeler	375.3	348.5	—
Highgate	76.4	86	9.6
Ingersoll	930.2	1,085.7	155.5
Kitchener	5,784.2	6,648.8	864.6
Lambeth	16	22.7	6.7
Listowel	372.6	453	80.4
London	10,757	10,656.8	—
Lucan	155	216.6	61.6
Lynden	92.5	87.8	—
Milton	608.5	670	61.5
Milverton	274	290.8	16.8
Mimico	265.4	388.7	123.3
Mimico Asylum	32.1	37.5	5.4
Mitchell	181	195.7	14.7
Moorefield	36.2	123.5	87.3
Mt. Brydges	26.8	23.1	—

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Niagara Falls	2,707.8	3,610	902.2
Niagara-on-the-Lake	158.2	229.2	71
New Hamburg	225.2	236	10.8
New Toronto	3,036.2	3,284.2	248
Norwich	203.3	223	19.7
Oil Springs	112	95	—
Otterville	34.2	33.5	—
Palmerston	101.8	191.6	89.8
Paris	682.3	643.4	—
Petrolia	383.4	442.3	58.9
Petersburg and St. Agatha	21.4	17	—
Plattsville	100.5	100.5	—
Port Credit	87.1	103.2	16.1
Port Dalhousie	122.6	144.7	22.1
Port Stanley	75.7	124.6	48.9
Preston	1,374	1,485.2	111.2
Princeton	8.8	15.6	6.8
Provincial Brick Yard	136.7	123.3	—
Ridgetown	155.5	173.6	18.1
Rockwood	56.3	41.2	—
Rodney	41.8	91.6	49.8
Sarnia	2,486.6	2,795	308.4
Seaforth	325.7	281.5	—
Simcoe	187.6	214.4	26.8
St. Catharines	3,070	3,477	407
St. George	61.6	60.3	—
St. Jacob's	92.5	88.4	—
St. Mary's	560.3	878	317.7
St. Thomas	2,356.5	2,417	60.5
Stamford Township	200	423.5	223.5
Stratford	1,662.3	2,024	361.7
Strathroy	225.2	387.4	162.2
Tavistock	266.7	264	—
Thamesford	95.8	83	—
Thamesville	56.3	62.7	6.4
Thorndale	120	110	—
Tilbury	87.1	131.3	44.2
Tillsonburg	762.7	819	56.3
Toronto	56,944	59,598	2,654

New Municipalities—Niagara System

Municipality	Date Connected	Initial Load in H.P.	Load in H.P. October, 1920	Increase
Port Colborne.....	March 1st, 1920	273	270	—
Markham.....	April 1st, 1920	20	37	17
Parkhill.....	May 3rd, 1920	40.2	48.2	8
Glencoe	August 14th, 1920	45.5	67.5	22

Severn System

The generation and distribution of power for use by the municipalities on the Severn System has been carried on very satisfactorily during the year. The power for the system is generated at the Big Chute Plant on the Severn River, but when the demand by the customers on this system exceeds the maximum capacity of the plant, power is obtained from the Commission's generating stations at Eugenia and Wasdell's Falls.

**CURVE SHOWING
MONTHLY INCREASE
OF POWER LOAD
OF MUNICIPALITIES
NIAGARA SYSTEM
OCT. 1910 to OCT. 1920**

**H. E. P. C.
ONTARIO**

1910 Oct. Nov. Dec. 1911 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1912 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1913 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1914 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1915 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1916 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1917 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1918 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1919 Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec. 1920 Jan. Feb. Mar. April May June July Aug. Sept. Oct.

The Big Chute Plant, the Eugenia and Wasdell's Plants of the H.E.P.C., and the Swift Rapids Plant of the Orillia Commission have operated this year very successfully in parallel, with decided benefit to all systems served.

Adequate housing and storeroom facilities at the Big Chute Plant for the live stock and transportation equipment were arranged by remodelling and re-constructing the old construction camp buildings.

A permanent roadway was opened up between the Big Chute Plant and Severn Falls on the C.P.R., a distance of about six miles, to afford the required transportation facilities for getting in or out supplies, repair parts, or medical attention, if necessary, during the spring and fall. During the spring break-up, and sometimes during the fall months, transportation by river becomes practically impossible.

A suitable building for storeroom, and for housing the machine shop tools required in connection with maintenance work, was erected at the Big Chute Plant.

A small office building was erected on the switching station property at Waubauskene, and an office opened to handle the details on the Severn System and Combined System operation and maintenance.

Considerable maintenance work was carried out on the high-tension lines between Waubauskene and Big Chute, and the switching structure at Black River on this section of the line was completely overhauled. On a number of sections of high-tension lines exposed to severe wind storms, additional storm guys were installed to increase strength of these sections.

On several of the high-tension lines where the poles are affected to some extent by rot at the ground line, considerable maintenance work was carried out to strengthen these lines.

An S. & C. 22,000-volt arrester was installed at Thornton Station this spring, which has apparently been of considerable benefit to the station equipment and to the system in general.

Severn System

Municipality	Load in H.P. October 1919	Load in H.P. October 1920	Increase
Midland.....	1,160.8	1,362	201.2
Penetang.....	832.8	900.8	68
Collingwood.....	1,309.6	1,286.8	....
Barrie.....	654	750.6	96
Coldwater.....	47	49.5	2.5
Elmvale.....	103.2	111.2	8
Stayner.....	140.4	184	43.6
Creemore.....	49.5	45.8	....
Waubauskene.....	23	26.1	3.1
Pt. McNicoll.....	32.1	36	3.9
Victoria Harbor.....	46.6	48.2	1.6
Camp Borden.....	163.5	139.4	....
C.P.R. Elevator.....	1,290.7	1,099	....
Cookstown.....	69	55	....
Alliston.....	122	132.7	10.7
Bradford.....	38.8	52.2	13.4
Beeton.....	84.4	89	4.6
Tottenham.....	24.7	31.2	6.5
Thornton.....	10	12	2

Eugenia System

The operation of the Eugenia System has been very satisfactory this year, and the load has increased over the previous year.

The power for the system is generated at Eugenia Falls Power House, and this plant is operated in parallel with the H.E.P.C. plants at Big Chute on the Severn System, Wasdell's Plant on the Wasdell's System, and the Swift Rapids Plant, owned and operated by the Orillia Water, Light and Power Commission. The parallel operation of these plants is a great benefit to all systems served.

The installation of the third unit, consisting of a 4,000 h.p. turbine, 2,820 k.v.a. generator, and 40 k.w. exciter, was completed and unit placed in service. The operation of this unit has been successful, and has aided to a great extent in the operation and maintenance of the plant. Previously the first two units were required in constant service to supply the system, rendering it impossible to shut down either of them for a sufficient length of time for proper overhauling. After the No. 3 unit was placed in service the No. 1 unit, of 2,000 h.p. capacity, was taken out of service and its turbine and generator completely overhauled.

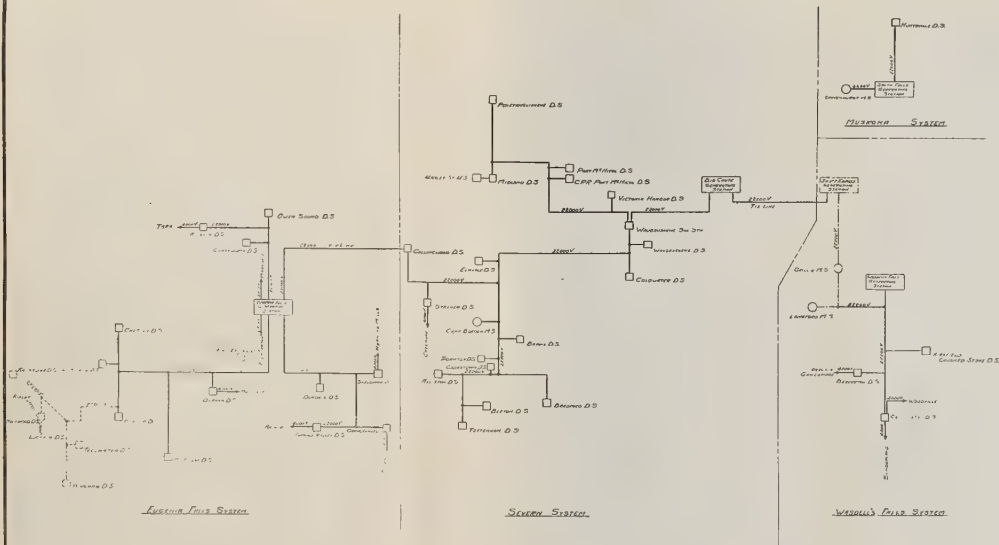
Johnson valves were installed on each of the old turbines in place of the old gate valves, which it had become almost impossible to operate under the head at this plant. The Johnson valves are hydraulically operated, and afford a very much more rapid means of controlling the water to the turbines.

The alterations made and additional equipment and transformer capacity installed at the Hanover Station allows increased load to be carried for the Hanover and Neustadt municipalities, with added facilities for operation and maintenance of the equipment at this station, and improved service to the customers fed out of the station.

On a number of sections of the high-tension line which were exposed to severe wind storms, additional storm guys were installed to strengthen the line.

Eugenia System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Owen Sound.....	1,139.4	1,340	200.6
Flesherton.....	67.6	55.4	—
Dundalk.....	93.2	104.5	11.3
Durham.....	85.7	130	44.3
Mt. Forest.....	152.2	192.7	40.5
Chatsworth.....	22.2	28.6	6.4
Markdale.....	99	90.6	—
Holstein.....	9.3	9.6	.3
Chesley.....	230.5	247	16.5
Shelburne.....	158	162.2	4.2
Orangeville.....	120	144.5	24.5
Horning's Mills.....	5	5	—
Grand Valley.....	59.9	63.6	3.5
Arthur.....	159.5	126	—
Hanover.....	650	727.8	77.8
Tara.....	31	53.6	22.6
Elmwood.....	52.9	58	5.1
Carlsruhe & Neustadt.....	64.3	104.5	40.2



HYDRO-ELECTRIC POWER COMMISSION
 1000000
 DIAGRAM OF EUGENE FALLS, SEVERN, WADDELL'S FALLS,
 AND MUSKOGEE SYSTEMS
 1000000

- KEY -

- Generating Station
- Distribution Station
- Interconnecting Station
- Transmission Lines of Service

Approved: *[Signature]*

Checked: *[Signature]*
 C.E. 1000000

1000000
 1000000
 1000000

Wasdell's System

The load on the Wasdell's System has shown an encouraging growth during the year, the load on the existing stations having increased and new customers being taken on. The generating plant at Wasdell's Falls, on the Severn River, has operated throughout the year in parallel with the Big Chute Plant on the Severn System, and the Eugenia Plant, and with the Swift Rapids Plant of the Orillia Commission. Although smaller than the other three plants with which it operates in parallel, it has added materially to the successful results obtained.

The excess power available at Wasdell's, over and above the demands by the customers on the Wasdell's System, is by aid of the parallel operation transmitted and used by the customers on the Severn System.

The system was extended to serve the Municipality of Kirkfield and the plant of the Crushed Stone Company, Ltd., near Kirkfield. Also several rural extensions were added to serve farming districts on the south end of the system.

The removal of the steel conductor on certain portions of the high tension line and the replacing of same by aluminum conductor was of considerable benefit in connection with the regulation of voltage and operation of the System.

To facilitate the transmission of the necessary instructions and messages relating to the operation of the Wasdell's generating station in parallel with the other plants, and in connection with the operation and maintenance work on the Wasdell's System, the telephone line was double-circuited between the Power House and Fawkham Junction. This arrangement permits the use of one telephone line for communication between Wasdell's Plant and the other plants operating in parallel, and the use of the other line in connection with the operation and maintenance work on the Wasdell's System. This arrangement has proved a benefit to the system.

The turbines and generators at this plant were completely overhauled during the summer.

Extensions were made to the operator's cottage at Wasdell's Plant. The kitchen was enlarged and a verandah added to the front of cottage, to furnish better facilities for the comfort and housing of the operating staff at this plant.

Wasdell's System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Beaverton.....	100.5	88.4	—
Brechin	65	81	16
Cannington	70.3	101.8	31.5
Sunderland.....	40.2	75.5	35.3
Woodville.....	50	89.5	39.5

New Municipality—Wasdell's System

—	—	Initial Load H.P.	Load in H.P. October, 1920	Increase
Kirkfield.....	Connected June 18th. 1920	10.5	15.6	5.1

Muskoka System

The generation and distribution of power for use by the Municipalities of Huntsville and Gravenhurst, on the Muskoka System, has been very satisfactory during the year. The power for distribution is generated at the South Falls Plant, on the south branch of the Muskoka River, about three miles south of Bracebridge.

Certain repairs were completed on the main dam at this plant that greatly strengthened this structure, and made it possible to use the river flow more efficiently for power purposes. No trouble was experienced at this plant during the summer due to water shortage.

Muskoka System

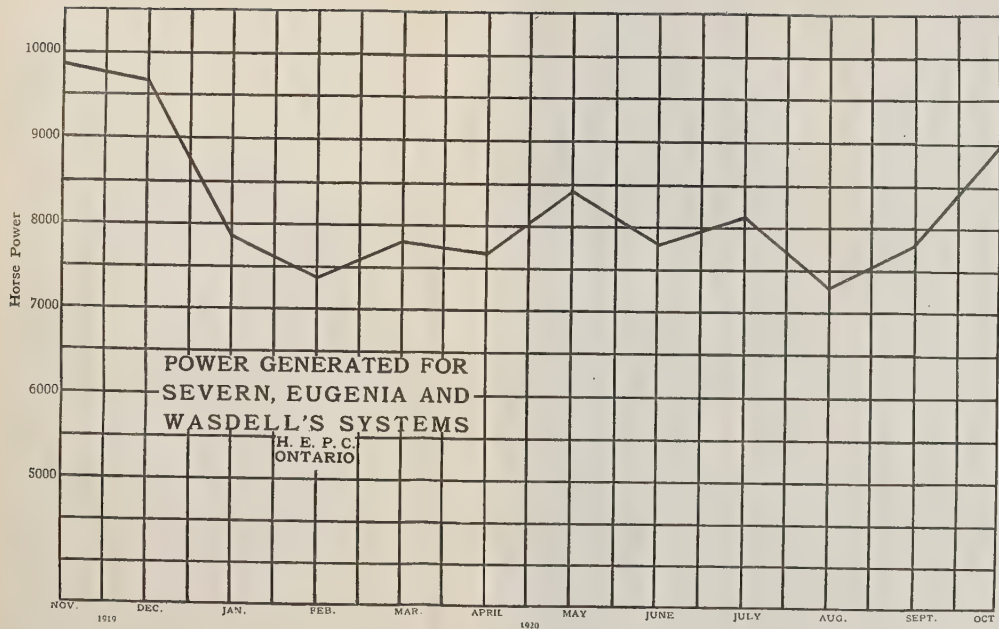
Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Gravenhurst.....	827	611	—
Huntsville.....	841.8	655.5	—

St. Lawrence System

The St. Lawrence System has enjoyed a year of ample power supply and one which has not been notable for any particular operating features. Shortly after the completion in January of two operators' cottages at Cornwall, a reduction in the staff was made which has resulted in a noticeable saving. Attendants had been continually on duty in the station, three shifts being maintained, but the installation of bell alarms in the station and cottages, so arranged that the automatic opening of any of the oil switches, or the failure of the water supply on either of the transformers would ring them, made it possible to dispense with one operator, maintaining a staff consisting of a superintendent, one operator, and one line patrolman with some experience in station operation. This method of operation worked out very well in practice.

For the convenience of the Toronto Paper Company, temporary power was supplied to them during the latter part of March and the early part of April, amounting in all to about a month, during which the Department of Railways and Canals had unwatered the Cornwall Canal and thus made the Company's hydraulic-driven generator inoperative. This additional power amounted to about 475 h.p., and largely accounts for the abrupt increase in the system load for these months.

Neglecting the unnatural shape of the load curves for March and April, a gradual though substantial increase is evident; in fact, October, 1920, shows an increase of 500 h.p. over October, 1919, and while this year's operation has been without particular incident, all present indications point to an unprecedented expansion during the coming fiscal year.



St. Lawrence System

Municipality	Load in H.P., Oct., 1919	Load in H.P., Oct., 1920	Increase
Brockville.....	965	1,048	83
Prescott.....	251	220	...
Winchester.....	82	96	14
Chesterville.....	150	130	...
Williamsburg.....	25	17.6	...
Toronto Paper Co.....	288	725	437

Central Ontario System

Owing in part to the number of generating stations and the various loops and rings in the transmission network of the Central Ontario System, the service has been of a very high standard, both as to continuity and voltage regulation. Line trouble, when experienced, has been for the most part confined to short sections, through the selective action of relays, which automatically isolate and cut out sections on which trouble develops without disturbing the rest of the system. No complete system interruption has occurred during the year, and each town has, as a rule, been interrupted only when trouble has occurred on its own particular section.

A very important line was added to the system May 30th, when the Healy Falls-Peterboro line was put in service. This line completes a loop with the original lines from Healy Falls to Peterboro, via Trenton and Port Hope, and thereby provides two sources of power to Brighton, Colborne, Cobourg, Port Hope, Millbrook and Peterboro; also, in a sense, to Newcastle, Bowmanville, Oshawa and Whitby, which receive power from the Port Hope-Oshawa line, and to Wellington and Picton, which receive power from the Trenton-Port Hope line. Lindsay, too, has benefited somewhat, although it has in Fenelon Falls a source of power which can supply a large part of its requirements. The usefulness of this line is not confined to periods of actual line trouble on other sections, as with the additional source of supply, maintenance work on the loop can be done without interruptions to customers, and at a minimum of expense, enabling all sections of line to be kept in better condition. The direct telephone line between Healy Falls and Auburn is of great benefit in system load despatching, as it provides a shorter and better transposed line between Belleville and Auburn. Previously telephone communication between the system operators at Belleville and Auburn generating station was carried on via Trenton and Port Hope with great difficulty, on account of the length and noisy condition of the line: but now the new line provides both an alternative connection in case of trouble and a shorter line over which, under normal conditions, conversation can be carried on without difficulty.

The Healy Falls-Peterboro line is 28 miles long, of wood wish-bone type construction, with 4/0 steel reinforced aluminum power conductors, and 3 strand No. 12 telephone cables. Sectionalizing switches have been installed at Norwood, where provision is made for serving a high-tension station which will supply both Norwood and Havelock, the latter by means of a 4,160-volt line.

Work on the reinsulation of the 44,000-volt lines, which was so actively carried on during the previous year, is now nearly completed. In fact, of the 92

miles of line which could not be done last year, 60 miles have now been completed, and 27 miles originally intended to be reinsulated have been deferred on account of the recent construction of the Healy Falls-Peterboro line, leaving only five miles to be done. The deferred section has given fairly satisfactory service, and since it is now a part of the new loop it can, in case of trouble, be disconnected without interfering with service to any customers.

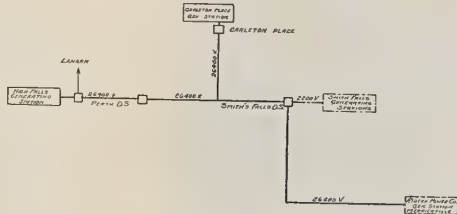
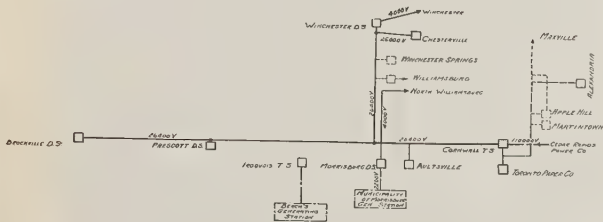
A station for the supply of power to Lakefield was placed in operation July 19th, together with a 6,600-volt line from Auburn Generating Station. The station is of outdoor type, with 3 outdoor single phase, 6,600 to 2,400-volt transformers of 75 k.v.a. capacity, the oil switches and metering equipment being located in a small adjacent building. Advantage of this line has been taken to serve the County House of Refuge, near Lakefield, by a short tap located near the town.

Coincident with the supply of power to Lakefield, a 6,600-volt 3-phase line from Healy Falls, to supply the Ontario Rock Company at Preneveau, was put into operation.

At Peterboro the possibility of prolonged interruptions to the street railway has been almost entirely eliminated by the installation of an auxiliary starting motor on the 100 k.w. synchronous motor generator set. Previously the railway equipment consisted of a 200 k.w. and a 100 k.w. synchronous motor generator set, and a 100 k.w. induction motor generator set, the latter being the only one which could be started from the A. C. side, and, consequently, if for any reason an interruption occurred on the A. C. side, the equipment could not be started without the induction motor generator set, whereas now, by means of the auxiliary starting motor, a duplicate means of starting has been provided.

An economy in starting motors has been made at the Oshawa synchronous condenser station, where a 35 h.p. and a 40 h.p. motor, formerly used for starting the synchronous condenser, have been replaced by a 75 h.p. motor, which is more satisfactory from an operating standpoint, and it sets free, for use elsewhere, equipment of greater value.

During the period from September 1st to October 17th there was a rather serious shortage of power on the Central Ontario System, due to an unusually low stream flow in the Trent River over which the Commission has no control, the Trent River being a regulated stream, and under the control of the Department of Railways and Canals of the Dominion Government at Ottawa. During the period of shortage the entire flow of the river was utilized to the utmost at all the Commission's plants, and every possible effort was made to obtain power from outside sources, such as the Quaker Oats Company, of Peterboro, who responded generously. The Campbellford town plant and Fenelon Falls town plant also gave what additional assistance they could. Unfortunately the utmost combined output of all these plants failed to meet the demand for power.

RIDEAU SYSTEMST. LAWRENCE SYSTEM

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

ST. LAWRENCE & RIDEAU SYSTEMS

60 CYCLES

APPROVED: *[Signature]*
CHIEF ENGINEER

REVISIONS—
OCT 21-1917
OCT 21-1918
OCT 20-1919
OCT 20-1920

C-166 SUPERVISOR C-166

-KEY-



Generating Station



Distributing Station



Stations & Lines in Service



Stations & Lines under Construction or Proposed



Stations & Lines under Construction or Proposed

Central Ontario System

COMPARISON OF MUNICIPAL LOADS—OCTOBER 1919-1920

Municipality	Peak Load in H.P., Oct., 1919	Peak Load in H.P., Oct., 1920	Increase
Belleville	1,434	1,689	255
Bloomfield	32	54	22
Bowmanville	1,162	1,206	44
Brighton	82	122	40
Brooklin Rural	117	134	17
Cobourg	643	804	161
Colborne	86	109	23
Deseronto	268	302	34
Kingston	1,710	1,707	—
Lakefield	—	161	161
Lindsay	1,247	1,158	—
Madoc	125	131	6
Millbrook	30	34	4
Napanee	338	374	36
Newcastle	27	37	10
Newburg	434	273	—
Omeme	24	40	16
Orono	27	37	10
Oshawa	2,890	3,307	417
Peterborough	3,320	3,950	630
Picton	205	295	90
Port Hope	410	405	—
Stirling	87	134	47
Trenton	529	593	64
Tweed	105	92	—
Wellington	71	87	16
Whitby	263	424	161

NOTE — Indicates a decrease.

Rideau System

The completion of the new generating station at High Falls, on the Mississippi River, has marked a new era in the operation of the Rideau system, and has, for the first time, enabled the Commission to supply the municipalities of Smith's Falls, Perth and Carleton Place with all the power they require. The station consists of three units, one of which is a single 875 k.v.a. generator direct connected to its turbine, and the other two consist of two 350 k.v.a. generators direct connected to opposite ends of the same turbine shaft. The first-mentioned unit went into service May 1st, and the other two on June 26th. Three 750 k.v.a. three-phase 4,160/26,400-volt transformers are used to step up from the bus voltage of approximately 4,600 volts to a line voltage of approximately 27,000 volts at which power is delivered to the High Falls-Perth line, which had previously been used to deliver power to High Falls for construction purposes. The station operates with a normal net head of 78 feet, and the general layout is simple and convenient for operation and presents throughout a very good appearance.

Situated, as it is, approximately eight miles from the nearest village, it was necessary to provide means of housing the operators. One cottage was built early in the construction period, so that it could be used by the Construction Staff, and it was then thought that further cottages would be built for the operators, but the excessively high prevailing prices made it desirable to defer further cot-

tages for a time. Some of the smaller buildings are at the disposal of the operators who require them, and an effort has been made to utilize local men for operation.

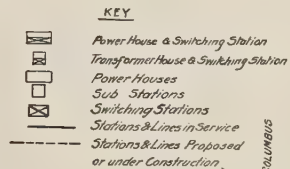
The partial failure of the power supply at Merrickville during the months of February and March, due to insufficient stream flow in the Rideau River, greatly aggravated the need for the High Falls Plant, and the completion, on May 31st, of the temporary arrangements to supply power to Carleton Place from the High-Tension System also called for additional power. Prior to May 31st the Commission's Generating Station at Carleton Place was the only source of power for that town, and it was quite insufficient to meet the needs. However, the three plants operating in parallel from May 31st were able to meet the system demands fairly well (due to the fortunate fact that the Rideau Power Company at Merrickville were temporarily able to supply more power than they were in February and March), pending the completion of the two remaining units at High Falls, which were made available June 26th. From this time onward the High Falls plant has been able to carry the entire system load without difficulty, and to the great satisfaction of all concerned. Smith's Falls benefited particularly, since they were able to discontinue the operation of the local hydraulic plants, and to give full service to all customers requiring power. It is curious to note that the second shortage of power at Merrickville set in immediately after the completion of the High Falls plant, and continued to the end of the year.

Operation of the Carleton Place plant was discontinued as soon as all units at High Falls were in service, and in order to provide for further growth in the system load, and for a standby for any possible contingencies, the hydraulic equipment in the Generating Station was thoroughly overhauled. The runners of both turbines had dropped about 2 inches, due to the wear on the old lignum vitæ thrust bearings. These were replaced, although the construction of the wheels made it exceedingly awkward to do so. It was also necessary to recog the Crown gears, and to rebuild the concrete pedestal which supports the adjacent bearings of the two units, as excessive vibration had practically shaken these bearings to pieces. A number of other repairs of a general nature were made, and the wheels put in shape for operation when required.

The permanent equipment for the Distributing Station at Carleton Place was put into operation October 24th, the high-tension equipment being located in a part of the building which housed the generating equipment, and the low-tension switchboard being located on the generator floor of the generating station.

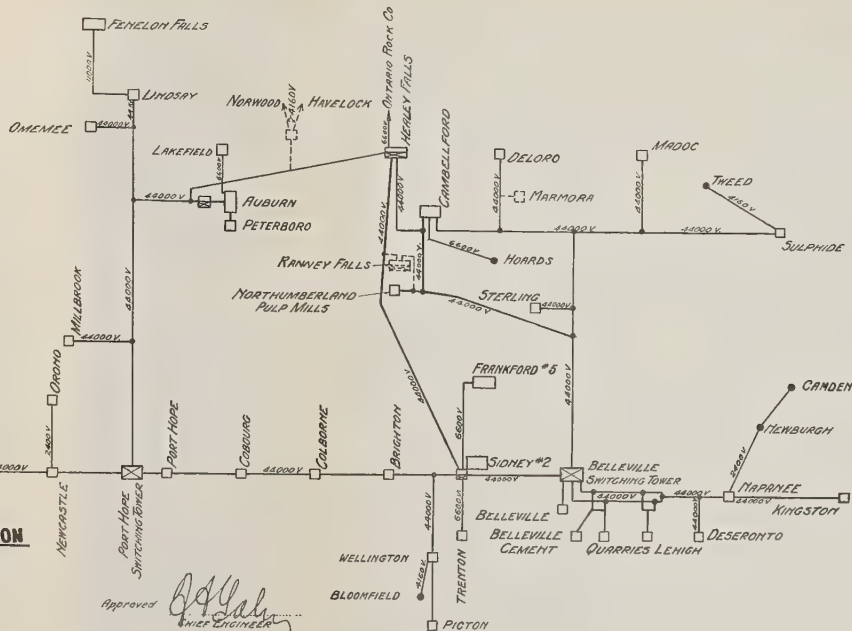
At Smith's Falls the installation of the permanent cooling water pump and motor has materially reduced the temperature of the transformers which, for several months, had been operating with a temporary and unsatisfactory cooling equipment, due to failure of manufacturers to make delivery of the permanent equipment.

Several little problems in connection with the parallel operation of the plants on the system have arisen and have been successfully met, and, taken altogether, the operation since the advent of High Falls has been very gratifying and shows a rapid increase in the system load, the depression in the load curve during the months of January, February, March and April being due to the partial failure of power supply at Merrickville.



**HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO
CENTRAL ONTARIO SYSTEM**

October 25-1918
Revised Oct 30, 1919.
Oct- 30 - 1920
Superseding C-154 of Oct 25-1917.



Rideau System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Smith's Falls	450	1,052	602
Perth	342	558	216
Carleton Place	514	694	180

Nipissing System

The operation of the Nipissing System has been carried on very successfully during the past year with remarkably few interruptions to service, the increasing load being carried without any restrictions on the customers' demands.

The hydraulic plant generating power for this system is located on the South River about two miles from Nipissing Village, and in the past has been seriously affected by the extreme variation in the flow of the South River. The steam plant is located at North Bay, serving as a standby in emergencies, or as an auxiliary in case of shortage of power. During the low flow periods, it was usually necessary to operate this steam plant to assist the hydraulic plant in carrying the load of the system. In order to overcome this very undesirable condition, storage dams were erected at the outlet of a number of the lakes feeding the South River so that ample water could be stored and the flow in the river regulated to allow for more efficient operation of the Hydraulic Plant at Nipissing. The erection of these storage dams allowing more suitable control of the flow of the river has been a great benefit to this system. Although load was higher than last year it was not necessary to operate the steam plant this summer or fall with the exception of a short time when the hydraulic plant at Nipissing was shut down when the new trash racks were being installed at the headlock to replace the racks damaged by ice several years ago.

A new bridge was erected over the pipe line near the plant in order to transport the heavy equipment in connection with the proposed extension at this plant. Considerable maintenance work was carried out in connection with the wood stave pipe line and headlock controlling same.

The turbine equipment at this plant was overhauled and put in good operating condition.

Nipissing System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
North Bay	1,134	1,222	88
Powassan	97	84	—
Callander	39	40	1
Nipissing	3	3	—

Thunder Bay System

During the past year very satisfactory operation has been obtained on the Thunder Bay System. The Kaministiquia Power Company have maintained a very good standard of service. Due to the growth of the load taken by Port Arthur, it has been found necessary to increase the power held in reserve from the Kaministiquia Power Company from 6,000 to 7,000 horse-power.

Owing to the growth of the demand for power in certain sections of the city certain changes in the substation equipment would have been advisable, had it not been for the fact that power will be discontinued from the Kaministiquia Power Company shortly and the present equipment will be satisfactory under the new method of supplying power.

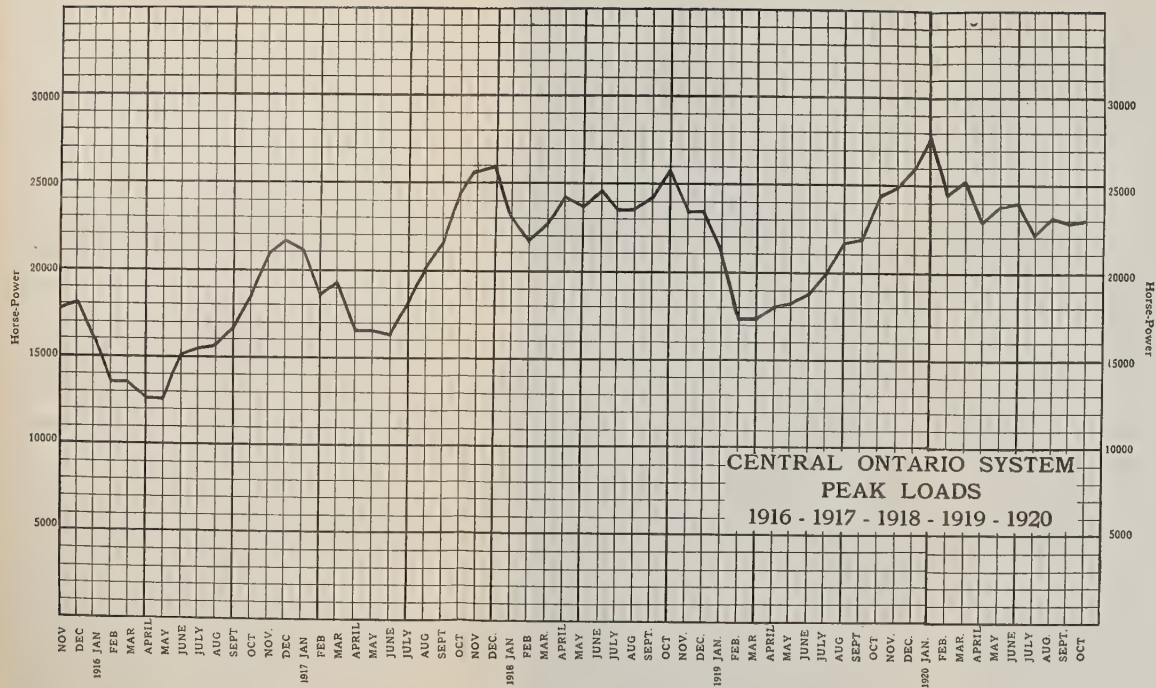
The equipment belonging to the Commission on this system has been maintained at the usual degree of high efficiency, the only new work at this station being the marked improvement made in the appearance of the station grounds.

Ottawa System

On the Ottawa System, the Ottawa and Hull Power & Manufacturing Company, who supply, through arrangements with this Commission, the Ottawa Hydro-Electric System, put into operation their new No. 2 Power House during the latter part of August. All power for Ottawa is now normally supplied from this generating station. The change-over from their No. 1 Power House to No. 2 Power House was affected without any interruption to service, the plants operating in parallel for a time, and No. 1 then being cut away. The old No. 1 Power House is still kept as a standby, or second source of supply, and service can be given from that station if necessary.

The Commission owns and maintains graphic metering equipment on the premises of the above company, for the purpose of checking amount of power supplied and load characteristics. Arrangements were made for the necessary alterations in this equipment to meet conditions arising out of the change-over from No. 1 Power House to No. 2 Power House.

The load on the Ottawa System shows some increase, the demand in October of this year being 7,640 horse-power, as compared with 7,450 horse-power in October of the previous year.

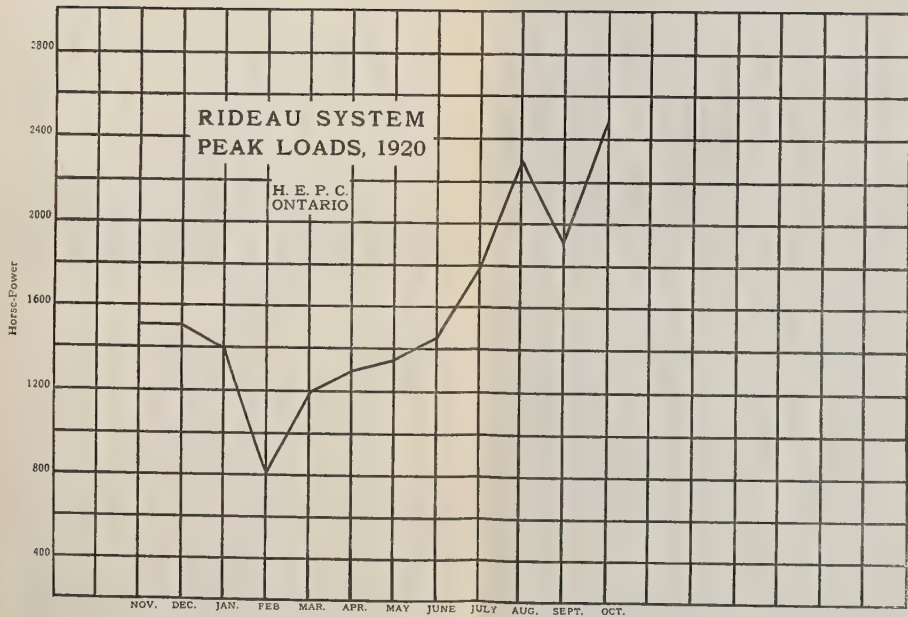


DETAILED STATEMENT OF ASSETS AND LIABILITIES—
31st OCTOBER, 1920

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920

Assets.		Liabilities.	
Niagara System:		Provincial Treasurer:	
Right of Way	\$1,482,884 06	Cash Advances for Niagara and other System, Less Contra Account	\$31,779,316 10
Steel Tower Lines	4,161,395 25	Cash Advances for Niagara Power Development Works	22,360,000 00
Transformer Stations	6,295,832 83	Unexpended portion of the sum appropriated by the Legislature to cover Expenditures by the Commission on account of the Province....	10,449 00
Wood Pole Lines	2,553,240 55		
	\$14,493,352 69	Bank of Montreal:	
Rural Lines	475,665 96	Electric Railways	300,000 00
	\$14,969,018 65	Cash Advances re Construction of Third Pipe Line on Ontario Power Company's property	1,200,000 00
Thunder Bay System:		Debentures issued to cover purchase of Capital Stock of Ontario Power Company of Niagara Falls.....	8,000,000 00
Power Development (Nipigon River)	\$3,547,732 46	Debentures issued to cover purchase price of Essex System	226,000 00
Transmission Lines (Nipigon River)	452,129 34	Debentures issued to cover purchase price of Thorold System	100,000 00
Transformer Station (Port Ar- thur)	91,082 43	Debentures issued to cover purchase price of capital stock of Sandwich, Windsor and Amherstburg Railway	2,039,000 00
Transmission Line (Port Arthur)	29,476 46		
	4,120,420 69	Debentures assumed:	
Seyvern System:		Line to Brich Companies at Streetsville	\$4,765 76
Power Development	\$649,767 39	Muskoka Power Development	43,907 47
Wood Pole Lines	552,256 60		
Transformer Stations	179,250 45	Central Ontario System—due thereto.....	1,719,472 22
	1,381,274 44	Accounts Payable	\$354,911 79
St. Lawrence System:		Bond Interest Coupons overdue but not presented	29,478 00
Wood Pole Lines	\$363,712 36		
Transformer Stations	277,401 16	Insurance Department:	
	\$641,113 52	Outstanding Claims and Awards.	\$244,154 60
Rural Lines	20 07	Surplus	22,949 25
	641,133 59		
Wasdell's System:			
Power Development	\$141,760 06		
Wood Pole Lines	153,690 29		
Transformer Stations	26,215 08		
	\$321,665 43		
Rural Lines	11,281 72		
	332,947 15		



Balances due to Municipalities in respect of amounts paid by them to 31st October, 1920 in excess of the cost of power supplied to them as provided to be paid under Section 23 of the Act:

Niagara System	\$519,504 72
Thunder Bay System	28,578 18
Severn System	23,961 91
Rideau System	5,214 13
	<hr/>
	577,258 94

Reserves for Sinking Fund:

Municipalities—	
Niagara System	\$715,912 36
Niagara Rural Lines	46,809 11
Thunder Bay System (Port Arthur)	
Severn System	20,446 98
Waddell System	39,341 52
Waddell Rural Lines	5,296 52
Eugenia Rural Lines	376 71
Ottawa System	105 83
Bonnechere Storage System	67 73
St. Lawrence System	2,480 06
	<hr/>
	835,476 49

Service and Office Buildings:

Office Buildings	\$40,098 09
Service Buildings	32,046 61
	<hr/>
	72,144 70

Reserves for Renewals:

Contributed by Municipalities—	
Niagara System	\$1,837,262 87
Niagara Rural Lines (Operated by Commission)	5,249 79
Thunder Bay System	39,713 67
Severn System	185,297 02
St. Lawrence System	68,910 67
Waddell System	31,273 51
Eugenia System	135,762 20
Muskoka System	27,646 18
Rideau System	21,822 21
	<hr/>

In respect of Service and Office Buildings:

Service Building	67,929 23
Office Building	7,249 33
	<hr/>
	75,178 56

Eugenia System:	
Power Development	979,424 83
Wood Pole Lines	727,460 81
Transformer Stations	206,879 86
	<hr/>
	\$1,913,765 50
Rural Lines	1,694 61
	<hr/>

Ottawa System:	
Meters, etc.	
	<hr/>
	1,009 57

Muskoka System:	
Power Development	\$148,018 13
Wood Pole Lines	54,313 44
Transformer Stations	9,785 70
	<hr/>

Rideau System:	
Power Development	\$748,941 41
Wood Pole Lines	233,602 24
Transformer Stations	49,844 27
	<hr/>

Bonnechere River Storage System:	
Round Lake Dam	\$20,292 68
Golden Lake Dam	11,092 81
Interest on above to 31st December, 1916	2,780 25
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Essex System:	
Purchase price of system	\$226,000 00
Additional expenditure to date...	149,516 68
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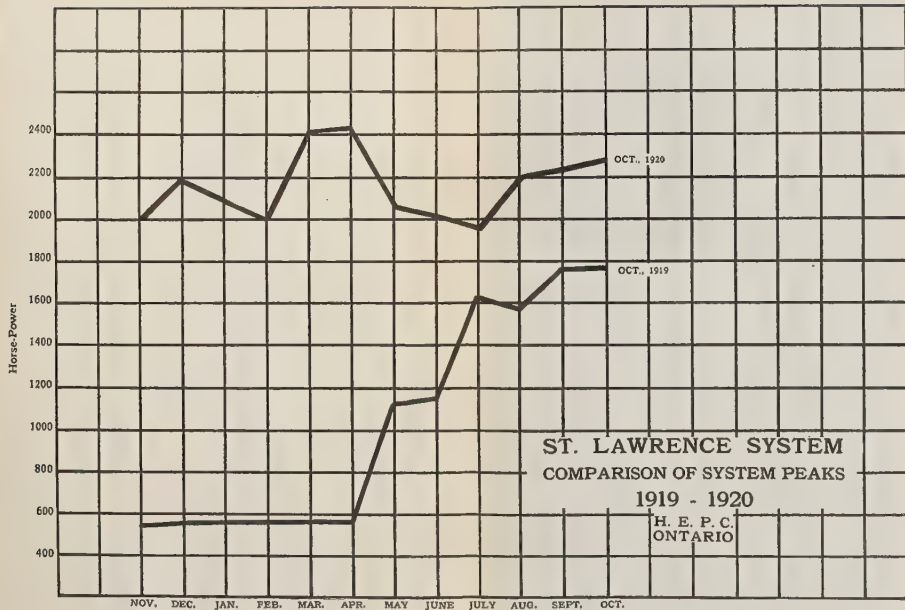
Thorold System:	
Purchase price of System	\$100,000 00
Less Credit Balance on Current Account	10,817 01
	<hr/>

Niagara Power Development Works:	
Expenditure to date	
Shares of capital stock of Sandwich, Windsor and Amherstburg Railway	
Sandwich Windsor and Amherstburg Railway—current account	
	<hr/>
	26,846,896 22
	<hr/>
	2,039,000 00
	<hr/>
	216,500 96

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920—Continued

<i>Assets.</i>		<i>Liabilities.</i>	
Electric Railway Construction:		Reserves for Contingencies:	
Right of Way	\$687,463 04	Niagara System	\$38,514 55
Construction Material	263,472 46	Thunder Bay System	4,254 48
Surveying and Engineering Account	276,669 31	Severn System	5,674 94
	1,227,604 81	St. Lawrence System	1,092 67
Service Building and Equipment, Toronto	\$421,602 55	Eugenia System	13,430 94
Garage Building and Equipment, Niagara Falls	15,790 92	Muskoka System	1,508 80
Equipment, Storehouse and Garage, Hamilton	9,356 19	Rideau System	625 39
Pole Yard and Equipment, Cobourg	19,557 91		\$65,101 77
Office Building		Surplus of Interest Account	\$15,418 20
Office Furniture and Equipment:		Bond Interest Accrued	32,837 40
At Toronto Office	\$92,484 92		
At Hamilton Office	1,314 59	Surplus arising from Departmental Operation in Service Building:	
At Electrical Inspection Office	4,767 90	Storehouse Surplus	29,181 72
Library	3,871 61	Machine Shop Surplus	10,925 37
Stationery and Office Supplies	26,597 71		40,107 09
Automobiles and Trucks		Contingent Liabilities—	
Inventories:		In respect of contracts entered into for works under construction	5,096,926 28
Construction and Maintenance, Tools and Equipment	\$256,399 08	Debentures issued in respect of Sandwich, Windsor and Amherstburg Railway (held by Bank of Montreal as collateral security) ..	61,000 00
Construction Material and Sundry Supplies	783,402 99		
Maintenance Material and Supplies	221,712 58	Debentures issued (including \$1,200,000.00 held by Bank of Montreal as collateral security) in respect of Port Credit-St. Catharines Radial Railway	11,360,363 00
	1,261,514 65		
Farm Equipment, Produce, etc.:			
Equipment and Supplies	\$21,006 61		
Live Stock and Produce	15,724 00		
Expenditures on account 1921 Crops	1,893 00		
	38,623 61		



Shares of Capital Stock on Ontario Power Company of Niagara Falls	8,000,000 00
Ontario Power Company of Niagara Falls:	
Expenditure in connection with Construction of Third Pipe Line	3,344,494 33
Current Account	173,178 55
Sinking Fund Investment on deposit with Provincial Treasurer	475,000 00
Interest accrued to date	82,122 64
In Provincial Securities under Section 15 of the Act—par value \$38,500	37,445 10
Investments:	
Debentures of the Hydro-Electric Power Commission purchased (issued in connection with the purchase of Capital Stock of the Ontario Power Company), par value \$115,000	79,844 50
Cash:	
In Banks	303,510 05
In hands of employees as advances on account of expenses	217,506 69
In bank to pay bond interest coupons overdue but not presented	29,478 00
Accounts Receivable:	
Due by Municipalities in respect of construction work and supply sales	320,556 21
Less reserve for doubtful accounts	4,288 65
Due by Municipalities in respect of Power Accounts	725,930 46
"Sinking Fund and Interest" and "Consumers" Accounts owing in respect of Rural Lines.....	13,886 01
	316,267 56
	550,494 74
	79,844 50
	594,567 74
	3,517,672 88

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920—Continued

Assets.

Due by users of Water Power
from Bonnechere Storage System
6,252 05

\$1,062,336 08

Balance due by Municipalities in re-
spect of the costs of Power supplied
to them as provided to be paid under
Section 23 of the Act:

Niagara System \$209,049 51
Severn System 40,713 72
St. Lawrence System 34,270 21
Wadell System 20,483 54
Eugenia System 76,877 72
Muskoka System 10,843 51
Rideau System 5,994 35

\$398,232 56

1,460,568 64

2,493 54

Net deficit on Rural Lines operated
by the Commission

Work in Progress:
Expenditures chargeable upon
completion to—

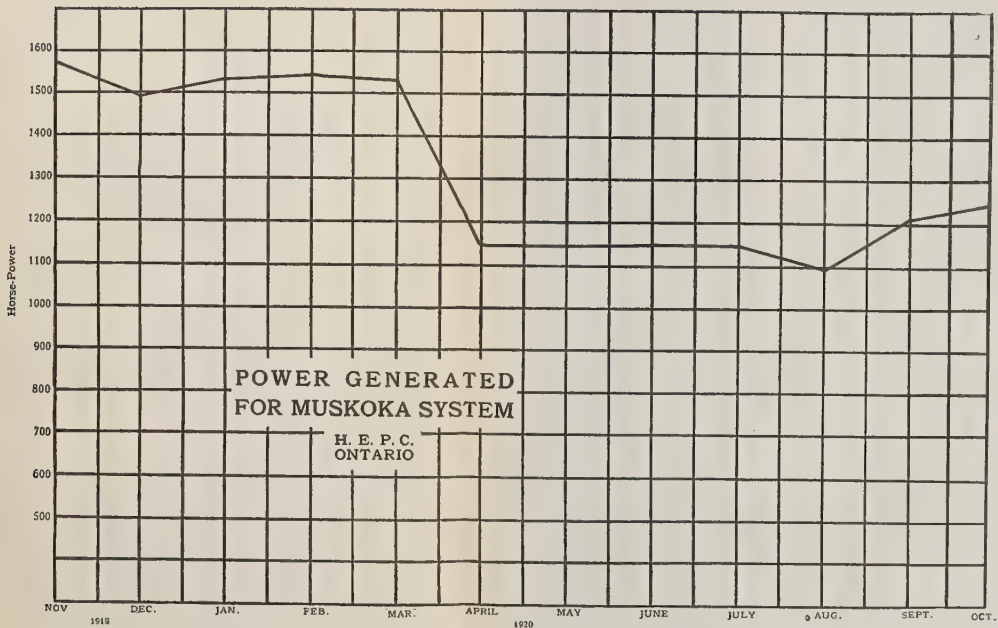
Sundry Municipalities 1,264 88
Capital Construction 74,872 08
Operating and Maintenance
Expenses 7,592 61
Radial Railway Investigation. 44,704 09

128,433 66
40,539 24

Insurance Unexpired

\$72,500,865 46

\$72,500,865 46



NIAGARA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Secs. 6c and 23 of the Act:

Power Purchased
Cost of operating and maintaining Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system
Interest on Capital Investment..
Provision for Renewal of Lines, Stations, etc.

Provision for Contingencies:

By charges against Municipalities
By charges against contracts with Private Companies which purchase power
By appropriating the net profit on power sold to Private Companies

Provision for Sinking Fund:

By certain Municipalities which were charged therewith upon the expiry of their five-year exemption period
By charges against contracts with Private Companies which purchased power

\$1,966,304 34

585,098 63
644,859 37
310,519 12

\$32,360 68
5,139 32-
11,214 61

48,714 61

195,569 61

\$3,751,065 68

Revenue for Period:

Collected from Municipalities....
Power sold to Private Companies
Add amounts due by certain Municipalities, being the difference between sums paid and the costs of Power supplied to them in the year ...
Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the year

\$224,258 63
111,577 62

112,681 01

Revenue \$3,751,065 68

\$3,751,065 68

NIAGARA

Statemen showing the Amount to be paid by each Municipality as the Cost under Section 23 sion from each Municipality on account of such cost—and the amount credited or charged to it in the year ending

Municipality	Interim Rates per Horse Power Collected by Com-mission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share
	To Dec. 31, 1919	To Oct. 31, 1920				Operating Maintenance and Adminis-trative Expenses
			\$ c.		\$ c.	\$ c.
Acton	35.00	32.00	23,207 86	175.3	1,889 27	1,151 81
Ailsa Craig	49.00	49.00	42,187 45	121.	1,664 06	1,086 11
Aylmer	38.00	38.00	51,266 47	154.9	1,669 40	1,624 96
Ayr	45.00	50.00	13,922 28	58.7	872 64	771 43
Baden	32.00	32.00	24,118 85	176.9	1,906 51	1,244 88
Beachville	27.00	27.00	30,839 39	260.8	2,810 73	2,207 97
Blenheim	50.00	50.00	36,793 38	122.6	1,321 30	1,865 21
Bolton	43.00	60.00	39,404 28	103.9	1,119 76	774 10
Bothwell	59.26	From Jun. 1 60.00	44,020 34	122.	1,314 84	1,670 42
Brampton	22.00	20.00	74,827 85	911.7	10,125 60	3,595 78
Brantford	18.00	18.00	244,263 66	3,789.2	41,287 56	13,070 46
Breslau .....	.....	.....	25,568 88	31.2	336 26	694 69
Brigden	57.50	57 50	32,183 86	81.4	877 28	1,124 27
Burford	60.00	70.00	15,282 34	36.5	393 37	916 13
Burgessville	48.00	48.00	6,537 21	22.4	241 41	398 25
Caledonia	24.00	24.00	6,560 37	69.1	744 71	243 08
Chatham	29.00	29.00	232,912 77	1,911.1	21,196 58	10,259 02
Chippawa	35.00	35.00	975 38	42.5	458 03	174 16
Clinton	43.00	43.00	46,064 00	171.7	1,850 47	1,667 31
Comber	60.00	60.00	30,880 39	84.9	915 00	1,111 59
Dashwood	56.00	56.00	20,825 02	46.9	505 46	497 32
Delaware	50.00	85.00	4,122 87	9.5	102 38	170 45
Dereham Twp.	37.00	37.00	7,842 64	56.7	611 07	785 31
Dorchester	50.00	50.00	4,839 53	23.2	250 04	316 29
Drayton	60.00	65.00	26,429 65	45.9	494 68	709 61
Dresden	42.00	38.00	34,771 07	211.9	2,283 72	1,723 56
Drumbo	45.00	60.00	3,576 78	18.1	195 07	183 59
Dublin	48.00	60.00	8,327 60	24.7	266 20	603 20
Dundas	14.00	14.00	43,159 62	1,153.3	12,429 51	2,437 64
Dunnville	27.77	35.00	86,519 69	236.9	2,553 15	1,191 24
Dutton	43.00	40.00	19,555 60	99.4	1,071 27	1,024 00
Elmira	38.00	38.00	38,223 01	199.2	2,746 84	1,334 03
Elora	40.00	40.00	39,212 62	195.1	2,102 66	1,270 64
Embro	60.00	75.00	18,095 48	42.	452 65	910 43
Etobicoke Twp.	27.00	27.00	22,154 18	274.6	2,959 46	1,232 44
Exeter	41.00	41.00	42,933 46	153.7	1,656 48	1,242 29
Fergus	40.00	40.00	32,391 69	149.1	1,606 90	1,481 96
Forest	63.00	63.00	46,584 21	110.	1,185 51	1,473 78
Galt	20.00	20.00	202,222 10	2,473.6	27,558 83	10,666 70
Georgetown.....	36.00	35.00	83,173 36	482.7	5,802 21	2,927 74
Glencoe.....	.....	78.35	26,365 68	10.4	112 08	128 72
Goderich	43.00	43.00	145,637 04	417.3	4,797 39	4,006 39
Granton	48.00	55.00	13,039 62	41.	441 87	629 42
Guelph	19.00	19.00	189,850 31	3,358.	38,290 29	13,247 73
Hagersville	34.00	36.00	37,916 76	229.6	2,474 47	1 395 86

SYSTEM

of the Act—of Power supplied to it by the Commission—the Amount received by the Commis-
each Municipality upon ascertaining by annual adjustment the actual cost of power supplied to
October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as pro- vided to be paid under Section 23 of Act	Amounts paid to Commis- sion by each munici- pality	Amount credited or charged to each Muni- cipality upon ascer- taining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contin- gencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1,047 01	550 23	37 49	441 55	5,117 36	5,691 61	574 25	.....	1919
1,466 08	783 70	25 88	.....	5,025 83	6,290 93	1,265 10	.....	.....
2,330 87	1,247 55	33 13	.....	6,905 91	5,888 73	.....	1,017 18	.....
623 30	334 80	12 55	202 38	2,817 10	3,020 66	203 56	.....	1917
1,084 86	564 17	37 83	430 73	5,268 98	5,554 74	285 76	.....	1919
1,379 02	718 15	55 77	511 76	7,683 40	7,041 31	.....	642 09	1919
1,658 12	859 78	26 22	.....	5,730 63	6,048 61	317 98	.....	.....
1,788 04	952 03	22 22	.....	4,656 15	5,962 70	1,306 55	.....	.....
1,927 07	1,007 63	26 09	.....	5,946 05	7,013 37	1,067 32	.....	.....
3,409 20	1,613 74	194 99	1,233 50	20,172 81	20,244 69	71 88	.....	1920
10,426 63	5,251 89	810 40	2,781 47	73,628 41	68,656 92	.....	4,971 49	1917
1,164 51	634 21	6 67	464 60	3,300 94	2,393 92	.....	907 02	1919
1,459 03	767 41	17 41	.....	4,245 40	4,678 20	432 80	.....	.....
689 34	373 81	7 80	.....	2,380 45	2,481 41	100 96	.....	.....
290 12	155 90	4 79	.....	1,090 47	1,074 17	.....	16 30	.....
296 96	158 45	14 78	101 87	1,559 85	1,659 80	99 95	.....	1919
10,446 94	4,950 16	408 73	.....	47,261 43	56,234 88	8,973 45	.....	.....
44 43	24 39	.....	.....	701 01	1,488 93	787 92	.....	.....
2,072 47	1,091 65	36 72	607 48	7,326 10	6,949 18	.....	376 92	1917
1,374 41	719 53	18 16	.....	4,138 69	4,846 00	707 31	.....	.....
945 55	510 84	10 03	.....	2,469 20	2,530 59	161 39	.....	.....
187 66	101 35	2 03	.....	563 87	756 82	192 95	.....	.....
353 02	185 34	12 12	.....	1,946 86	1,865 08	.....	81 78	.....
220 07	116 77	4 96	67 33	975 46	1,162 07	186 61	.....	1917
1,201 86	647 37	9 81	.....	3,063 33	2,933 44	.....	129 89	.....
1,556 21	767 23	45 32	.....	6,376 04	7,770 32	1,394 28	.....	.....
159 58	85 33	3 87	122 56	750 00	981 75	231 75	.....	1917
378 25	201 02	5 28	.....	1,453 95	1,422 61	.....	31 34	.....
1,945 79	992 30	246 66	768 92	18,820 82	16,227 19	.....	2,593 63	1920
3,932 52	2,158 35	50 67	.....	9,885 93	7,951 61	.....	1,934 32	.....
878 54	461 81	21 26	.....	3,456 88	3,934 70	477 82	.....	.....
1,662 47	877 23	42 60	576 18	7,239 35	8,170 56	931 21	.....	1918
1,782 95	951 38	41 73	600 52	6,749 88	7,722 59	972 71	.....	1917
821 16	444 45	8 98	349 04	2,986 71	2,972 11	.....	14 60	1917
994 44	451 73	58 73	.....	5,696 80	7,414 64	1,717 84	.....	.....
1,945 87	1,041 37	32 87	.....	5,918 88	6,301 30	382 42	.....	.....
1,472 38	787 33	31 89	540 12	5,920 58	5,964 63	44 05	.....	1917
2,099 87	1,107 41	23 53	.....	5,890 10	6,890 78	1,000 68	.....	.....
9,200 32	4,659 01	529 03	3,635 39	56,249 28	54,473 23	.....	1,776 05	1920
3,773 40	2,003 75	103 24	1,296 90	15,907 24	17,432 44	1,525 20	.....	1918
245 57	130 50	2 22	.....	619 09	819 41	200 32	.....	.....
6,601 08	3,511 62	89 25	1,894 95	20,900 68	17,720 59	.....	3,180 09	1917
591 01	317 27	8 77	.....	1,988 34	2,210 71	222 37	.....	.....
8,636 64	4,272 23	718 18	3,412 95	68,578 02	65,903 33	.....	2,674 69	1920
1,718 87	928 34	49 10	532 10	7,098 74	7,992 70	893 96	.....	1918

NIAGARA

Statement showing the Amount to be paid by each Municipality as the Cost under Section 23 from each Municipality on account of such cost—and the amount credited or charged to supplied to it in the year

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share Operating Maintenance and Adminis- trative Expenses
	To Dec. 31, 1919	To Oct. 31, 1920				
			\$ c.		\$ c.	\$ c.
Hamilton	14.00	14.00	632,263 87	17,415.5	195,192 93	27,935 34
Harriston	48.00	52.00	62,801 97	233.5	2,516 51	3,070 03
Hensall	47.00	55.00	25,161 37	55.4	597 08	633 74
Hespeler	21.00	21.00	34,055 30	379.4	4,088 93	1,802 92
Highgate	51.00	51.00	16,808 55	46.4	500 07	724 72
Ingersoll	23.00	21.00	90,732 00	1,057.	11,391 66	5,343 61
Kitchener	19.00	19.00	386,675 68	6,054.9	71,255 74	21,086 70
Lambeth	50.00	85.00	8,896 73	20.5	220 94	333 78
Listowel	37.00	37.00	85,752 47	440.4	5,346 34	4,342 89
London	19.00	19.00	748,411 80	11,056.3	123,057 64	35,014 22
London and Port Stanley Rly....	12.00+ 45c. per kwh	15.00+ 1c. per kwh	146,349 08	1,197.5	12,905 87	17,016 96
Lucan	40.00	40.00	30,413 88	181.8	1,959 32	1,345 97
Lynden	40.00	50.00	23,866 56	92.9	1,001 21	989 22
Markham		77.74	21,379 84	20.4	470 51	45 95
Milton	28.00	28.00	81,940 11	720.7	8,247 24	2,690 81
Milverton	35.00	35.00	46,794 05	284.3	3,364 00	2,622 54
Mimico	25.00	21.00	24,510 01	303.8	3,274 15	1,004 89
Mitchell	36.00	36.00	30,589 05	182.6	1,967 94	1,558 38
Moorefield	63.00	70.00	13,688 20	26.5	285 60	469 31
Mt. Brydges	50.00	70.00	10,632 65	24.5	264 05	410 70
New Hamburg	32.00	32.00	32,027 31	221.4	2,386 10	1,375 41
New Toronto	25.00	20.00	345,739 95	3,852.2	43,016 49	17,379 96
Niagara Falls	11.50	11.50	27,894 52	3,091.7	33,500 31	2,088 80
Niagara-on-the-Lake	28.00	28.00	7,107 59	165.8	1,786 89	1,895 46
Norwich	35.00	35.00	32,791 25	226.9	2,445 38	2,000 05
Oil Springs	38.00	43.00	29,140 11	113.2	1,220 00	981 53
Otterville	50.00	50.00	9,007 30	34.8	375 04	470 20
Palmerston	45.00	50.00	29,700 97	129.	1,390 27	1,623 99
Paris	20.00	19.00	48,781 23	660.6	7,119 51	2,700 42
Parkhill		75.23	26,912 87	22.2	239 26	262 28
Petrolia	36.00	36.00	78,874 88	463.6	5,296 38	3,596 52
Petersburg and St. Agatha District			13,710 35	19.5	210 15	622 51
Plattsville	60.00	65.00	26,075 86	79.5	856 80	894 34
Port Credit	25.00	23.00	8,496 50	90.4	974 27	491 26
Port Stanley	53.03	53.00	38,117 60	165.4	1,782 58	2,337 44
Preston	19.00	19.00	105,765 36	1,418.9	15,291 97	5,769 51
Princeton	70.00	85.00	7,779 92	11.8	127 17	216 83
Ridgetown	47.00	47.00	39,694 73	162.6	1,752 39	1,988 40
Rockwood	38.00	55.00	12,606 80	50.4	543 18	661 21
Rodney	63.00	63.00	15,342 87	53.2	573 36	659 83
St. George	45.00	45.00	15,699 38	58.1	626 17	476 23
St. Jacobs	32.00	32.00	11,180 95	68.3	736 09	566 71

SYSTEM—Continued

of the Act—of Power supplied to it by the Commission—the Amount Received by the Commission each Municipality upon ascertaining by annual adjustment the actual cost of Power ending October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts paid to Commission by each Municipality	Amount credited or charged to each Municipality upon ascertaining the cost of power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contingencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
28,495 66	14,497 42	3,724 79	11,260 64	281,106 78	256,050 15	.....	25,056 63	1920
2,850 33	1,502 06	49 94	.....	9,988 87	11,143 62	1,154 75	.....	.....
1,142 58	617 51	11 85	.....	3,002 76	2,985 65	.....	17 11	.....
1,549 54	790 56	81 14	612 33	8,925 42	8,370 85	.....	554 57	1920
759 85	398 01	9 92	.....	2,392 57	2,364 81	.....	27 76	.....
4,054 52	2,068 38	226 06	1,602 23	24,686 46	23,660 68	.....	1,025 78	1920
17,585 61	8,582 13	1,294 98	6,949 31	126,754 47	122,730 47	.....	4,024 00	1920
404 92	218 69	4 38	.....	1,182 71	1,626 04	443 33	.....	.....
3,772 56	1,953 00	94 19	.....	15,508 92	16,721 34	1,212 42	.....	.....
33,922 78	16,703 88	2,364 69	13,405 27	224,468 48	213,970 95	.....	10,497 53	1920
6,612 17	3,383 64	256 11	2,546 90	42,721 65	40,919 60	.....	1,802 05	1917
1,372 25	721 67	38 88	.....	5,438 09	7,214 96	1,776 87	.....	.....
1,077 29	585 18	19 87	.....	3,672 77	4,387 22	714 45	.....	.....
568 08	311 81	.....	.....	1,396 35	1,587 82	191 47	.....	.....
3,727 83	1,842 54	154 14	913 90	17,576 46	20,313 66	2,737 20	.....	1918
2,110 32	1,082 37	60 80	.....	9,240 03	9,993 94	753 91	.....	.....
1,100 21	499 77	64 97	289 77	6,233 76	6,578 41	344 65	.....	1919
1,362 60	699 13	39 05	538 46	6,165 56	6,573 90	408 34	.....	1920
622 30	334 46	5 66	.....	1,717 33	1,820 60	103 33	.....	.....
483 92	261 36	5 24	.....	1,425 27	1,492 82	67 55	.....	.....
1,448 66	755 98	47 35	572 47	6,585 97	6,840 35	254 38	.....	1920
15,657 06	7,273 73	823 88	1,177 75	85,328 87	81,424 41	.....	3,904 46	1917
1,273 68	699 06	661 21	.....	38,223 08	35,734 47	.....	2,488 61	.....
313 58	172 11	35 46	.....	4,203 50	4,592 13	388 63	.....	.....
1,425 81	748 86	48 55	487 48	7,156 11	7,940 76	784 65	.....	1919
1,317 76	676 84	24 21	.....	4,220 34	4,504 08	283 74	.....	.....
398 91	213 78	7 44	.....	1,465 37	1,679 22	213 85	.....	.....
1,347 18	704 96	27 59	.....	5,093 99	6,356 36	1,262 37	.....	.....
2,100 01	1,070 51	141 28	424 14	13,555 87	12,662 28	.....	893 59	1917
703 96	382 52	4 75	.....	1,592 77	1,646 30	53 53	.....	.....
3,553 32	1,760 15	99 15	.....	14,305 52	16,990 96	2,685 44	.....	.....
622 99	338 42	4 17	254 46	2,052 70	1,360 77	.....	691 93	1919
1,173 07	633 96	17 00	461 85	4,037 02	5,087 71	1,050 69	.....	1917
377 69	181 78	19 33	98 21	2,142 54	2,111 55	.....	30 99	1918
1,715 06	907 40	35 37	624 20	7,402 05	8,766 11	1,364 06	.....	1919
4,811 35	2,416 67	303 46	1,901 30	30,494 26	27,059 16	.....	3,435 10	1920
352 21	191 84	2 52	186 96	1,077 53	867 73	.....	209 80	1917
1,787 81	914 56	34 77	.....	6,477 93	7,515 43	1,037 50	.....	.....
568 49	304 99	10 78	217 11	2,305 76	2,461 24	155 48	.....	1918
697 39	371 86	11 38	.....	2,313 82	3,348 85	1,035 03	.....	.....
704 37	379 38	12 42	.....	2,198 57	2,321 23	122 66	.....	.....
502 97	263 98	14 60	.....	2,084 35	2,186 39	102 04	.....	.....

NIAGARA

Statement showing the Amount to be Paid by each Municipality as the Cost under Section 23 mission from each Municipality on account of such cost—and the amount credited of power supplied to it in the

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share Operating, Maintenance and Adminis- trative Expenses
	To Dec. 31, 1919	To Oct. 31, 1920				
			\$ c.		\$ c.	\$ c.
St. Mary's	28.00	28.00	83,744 48	623.8	6,722 91	5,649 87
St. Thomas	24.00	24.00	214,019 28	2,373.7	26,482 18	12,816 34
Sarnia	38.00	36.00	474,305 52	2,690.0	32,291 04	19,756 08
Seaforth	38.00	36.00	67,920 92	336.5	3,626 57	2,793 07
Scarboro Township		25.00	15,181 39	48.5	1,118 50	143 19
Simcoe	32.00	28.00	23,659 69	186.7	2,012 13	870 63
Springfield	65.00	65.00	11,630 04	30.3	326 56	632 53
Stamford Twp.	15.00	15.00	6,004 87	354.2	3,817 34	1,029 47
Stratford	25.00	25.00	190,818 72	1,766.1	19,993 86	11,042 32
Strathroy	42.00	40.00	73,335 67	329.	3,545 75	1,787 31
Streetsville			35,021 49	220.8	2,464 15	1,516 78
Tavistock	36.00	35.00	48,253 68	254.2	2,859 60	2,205 91
Thamesford	50.00	55.00	20,477 74	84.1	906 37	946 02
Thamesville	50.00	60.00	15,583 42	54.	581 98	741 06
Thorndale	50.00	60.00	19,562 31	72.2	778 12	1,150 97
Tilbury	45.00	50.00	21,267 24	91.	980 74	943 66
Tillsonburg	32.00	30.00	84,358 87	663.5	7,150 76	4,700 46
Toronto	14.50	14.50	3,106,915 33	56,620.3	619,216 40	90,080 78
Toronto Twp.	25.00	25.00	17,738 96	204.2	2,200 73	1,144 84
Walkerville	36.00	36.00	563,080 74	3,327.9	41,865 92	19,127 70
Wallaceburg	38.00	38.00	138,733 48	806.6	8,843 00	5,789 89
Waterdown	26.00	26.00	15,672 65	107.2	1,155 34	755 59
Waterford	39.00	33.00	18,497 12	132.	1,422 61	883 88
Waterloo	21.00	20.00	79,498 94	1,185.2	12,773 31	4,351 74
Watford	65.00	85.00	39,397 07	57.	614 30	1,274 37
Welland	14.00	14.00	119,945 00	3,077.5	33,167 27	3,438 05
Wellesley	39.00	39.00	28,051 31	117.2	1,263 10	1,045 39
Weston	25.00	23.00	88,435 79	983.3	10,597 36	3,795 68
West Lorne	55.00	55.00	18,128 60	81.7	880 51	964 14
Windsor	36.00	36.00	547,957 18	3,240.8	38,407 21	19,328 98
Woodbridge	33.00	31.00	24,667 87	152.7	1,645 70	1,149 63
Woodstock	20.00	20.00	100,992 42	1,584.7	17,978 85	7,183 89
Wyoming	38.00	60.00	13,115 64	37.2	400 92	509 16
Zurich	69.00	60.00	30,795 46	61.	657 41	615 38
Totals-Municipalities			12,060,526 96		1,684,850 96	504,908 30
Totals-Companies ...			2,244,062 64		281,453 38	80,190 33
Non-operating Capital			188,763 09			
Grand Total....			14,493,352 69		1,966,304 34	585,098 63

SYSTEM—Continued

of the Act—of Power supplied to it by the Commission—the Amount received by the Com-
or charged to each Municipality upon ascertaining by Annual Adjustment the actual cost
year ending October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as pro- vided to be paid under Section 23 of Act	Amounts paid to Commis- sion by each Muni- cipality	Amount credited or charged to each Muni- cipality upon ascer- taining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contin- gencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
3,799 43	1,842 93	133 41	1,501 42	19,649 97	17,467 40	.....	2,182 57	1920
9,682 82	4,827 90	507 67	3,826 37	58,143 28	58,224 83	81 55	.....	1920
21,375 47	10,628 89	575 31	.....	84,626 79	101,025 29	16,398 50	.....	.....
3,063 50	1,591 58	71 97	1,210 61	12,357 30	12,242 70	.....	114 60	1920
403 37	221 37	.....	.....	1,886 43	1,213 32	.....	673 11	.....
1,027 65	540 83	39 93	.....	4,491 17	5,356 51	865 34	.....	.....
527 47	285 00	6 48	.....	1,778 04	1,857 35	79 31	.....	.....
273 87	150 31	75 75	.....	5,346 74	5,002 85	.....	343 89	.....
8,613 72	4,256 27	377 72	3,403 88	47,687 77	45,112 34	.....	2,575 43	1920
3,335 45	1,773 68	70 36	1,189 60	11,702 15	12,801 35	1,099 20	.....	1917
1,557 79	792 67	47 22	588 05	6,966 66	9,593 54	2,626 88	.....	1920
2,173 37	1,125 00	54 37	.....	8,418 25	9,065 03	646 78	.....	.....
931 46	496 66	17 98	258 81	3,557 30	4,541 28	983 98	.....	1917
705 24	364 92	11 55	.....	2,404 75	3,150 99	746 24	.....	.....
880 03	470 50	15 44	517 84	3,812 90	4,199 53	386 63	.....	1917
982 76	502 07	19 46	.....	3,428 69	4,379 07	950 38	.....	.....
3,783 66	1,978 14	141 90	1,495 19	19,250 11	19,396 74	146 63	.....	1920
141,683 16	58,211 55	12,109 61	46,964 50	968,266 00	829,994 45	.....	138,271 55	1920
794 05	378 17	43 67	219 13	4,780 59	5,030 40	249 81	.....	1918
25,550 65	11,742 86	711 74	13,787 19	112,786 06	126,172 52	13,386 46	.....	1917
6,340 95	3,149 48	172 51	.....	24,295 83	30,800 85	6,505 02	.....	.....
703 59	379 13	22 92	278 05	3,294 62	2,745 00	.....	549 62	1920
807 26	426 66	28 23	.....	3,568 64	4,226 25	657 61	.....	.....
3,615 81	1,775 15	253 49	1,428 87	24,198 37	23,962 57	.....	235 80	1920
1,789 66	958 88	12 19	.....	4,649 40	4,449 16	.....	200 24	.....
5,466 58	3,000 32	658 19	.....	45,730 41	43,084 92	.....	2,645 49	.....
1,268 63	675 58	25 06	.....	4,277 76	4,520 63	242 87	.....	.....
4,029 07	1,933 74	210 30	1,469 48	22,035 63	22,928 48	892 85	.....	1920
823 52	435 24	17 47	.....	3,120 88	4,280 36	1,159 48	.....	.....
24,864 23	11,425 82	693 11	10,485 14	105,204 49	120,649 36	15,444 87	.....	1917
1,113 58	568 08	32 66	302 32	4,811 97	4,740 81	.....	71 16	1917
4,482 80	2,225 09	338 92	1,771 47	33,981 02	32,593 15	.....	1,387 87	1920
594 32	310 95	7 96	.....	1,823 31	2,100 12	276 81	.....	.....
1,398 88	757 22	13 04	.....	3,441 93	3,759 68	317 75	.....	.....
543,155 88	259,090 06	32,360 68	155,794 96	3,180,160 84	3,067,479 83	111,577 62	224,258 63	.....
101,703 49	51,429 06	5,139 32	39,774 65	559,690 23	570,904 84	11,214 61	.....	.....
.....
644,859 37	310,519 12	37,500 00	195,569 61	3,739,851 07	3,638,384 67	122,792 23	224,258 63	.....

NIAGARA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919	\$15,762 48
Added during the year ending 31st October, 1920:	
Amount charged to Municipalities as part of the cost of power delivered to them	\$32,360 68
Provision against equipment employed in respect of con- tracts with sundry power customers	5,139 32
Net profits from contracts with sundry power customers applied to Reserve for Contingencies	11,214 61
Profits to October 31, 1919, on contracts with sundry power customers, not previously applied	16,104 00
Interest at 4% per annum on monthly balances at the credit of the account	1,510 10
	66,328 71
	\$82,091 19
Deduct:	
Expenditures to cover contingencies met with during the year ending 31st October, 1920	43,576 64
	\$38,514 55

NIAGARA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919	1,623,123 16
Deduct expenditures to 31st October, 1919	130,009 70
	\$1,493,113 46
Added during the year ending 31st October, 1920:	
Amounts charged to Municipalities as part of the cost of power delivered to them	\$260,175 91
Provision against equipment employed in respect of con- tracts with sundry companies	50,343 21
Interest at 4% per annum on the monthly balances to the credit of the account	59,724 54
Renewals Reserve provided on second hand equipment purchased	435 59
	370,679 25
	\$1,863,792 71
Expenditures during the year ending 31st October, 1920	26,529 84
	\$1,837,262 87

NIAGARA SYSTEM.

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—Sinking Fund Requirements, Payment of which has been Deferred by the Commission under Section 23 of the Act. Sinking Fund Payments made by certain Municipalities which have been operating more than Five Years, and the Total of such Sinking Fund Payments, including Interest allowed thereon, to October 31, 1920.

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act. Sinking Fund Payments made by certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been	
	(a) For Period of	(b) Amount	(a) For Period of	
Acton	4 years ending Oct. 31, 1920	\$ 1,717 15 c.	1 year ending Oct. 31, 1920	
Ailsa Craig	4 " " " "	1,866 49	4 " " " "	
Aylmer	3 " " " "	2,398 01	3 " " " "	
Ayr	4 " " " "	923 72	3 " " " "	
Baden	4 " " " "	1,827 92	1 " " " "	
Beachville	4 " " " "	1,947 08	1 " " " "	
Blenheim	4 " " " "	2,688 72	4 " " " "	
Bolton	4 " " " "	2,755 29	4 " " " "	
Bothwell	4 " " " "	2,847 47	4 " " " "	
Brampton	4 " " " "	4,519 70	.....
Brantford	4 " " " "	13,065 08	3 years ending Oct. 31, 1920	
Breslau Dist.....	7 " " " "	2,758 46	1 " " " "	
Brigden	3 " " " "	1,577 10	3 " " " "	
Burford	4 " " " "	1,124 86	4 " " " "	
Burgessville	4 " " " "	410 39	4 " " " "	
Caledonia	4 " " " "	442 81	1 " " " "	
Chatham	4 " " " "	14,398 18	4 " " " "	
Chippawa Village.	2 " " " "	20 48	2 " " " "	
Clinton	4 " " " "	2,734 21	3 " " " "	
Comber	4 " " " "	1,517 82	4 " " " "	
Dashwood	4 " " " "	1,351 81	4 " " " "	
Delaware	4 " " " "	295 88	4 " " " "	
Dereham Twp. ..	2 " " " "	169 07	2 " " " "	
Dorchester	4 " " " "	315 00	3 " " " "	
Drayton	3 " " " "	1,393 92	3 " " " "	
Dresden	4 " " " "	1,950 85	4 " " " "	
Drumbo	4 " " " "	374 41	3 " " " "	
Dublin	4 " " " "	488 56	4 " " " "	
Dundas	4 " " " "	3,809 96	.....
Dunnville	3 " " " "	3,520 70	3 years ending Oct. 31, 1920	
Dutton	4 " " " "	1,345 93	4 " " " "	
Elmira	4 " " " "	2,465 05	2 " " " "	
Elora	4 " " " "	2,758 97	3 " " " "	
Embro	4 " " " "	1,292 90	3 " " " "	
Etobicoke Twp.	4 " " " "	915 64	4 " " " "	
Exeter	4 " " " "	4,851 26	4 " " " "	
Fergus	4 " " " "	2,177 54	3 " " " "	
Forest	4 " " " "	3,253 20	4 " " " "	
Galt	4 " " " "	14,096 61	.....
Georgetown	4 " " " "	5,501 38	2 years ending Oct. 31, 1920	
Glencoe.....	1 " " " "	97 04	1 " " " "	
Goderich	4 " " " "	9,225 29	3 " " " "	
Granton	4 " " " "	901 43	4 " " " "	
Guelph.....	4 " " " "	12,758 87	.....
Hagersville	4 " " " "	2,352 44	2 years ending Oct. 31, 1920	
Hamilton	4 " " " "	36,536 94	.....

SYSTEM

Sinking Fund Requirements, Payment of which, has been Deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to 31 October, 1920

the Payment Deferred	Sinking Fund Requirements Paid (or Charged) as Part of the Cost of Power		Interest at 4 % per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October, 1920
	(a) For Period of	(b) Amount		
\$ c.		\$ c.	\$ c.	\$ c.
413 75	3 years ending Oct. 31, 1919.....	1,303 40	50 72	1,354 12
1,866 49	.....	.....	.....	.....
2,398 01	.....	.....	.....	.....
721 34	1 year ending Oct. 31, 1917.....	202 38	.....	202 38
428 71	3 " " " 1919.....	1,399 21	59 62	1,458 83
544 95	3 " " " 1919.....	1,402 13	52 04	1,454 17
2,688 72	.....	.....	.....	.....
2,755 29	.....	.....	.....	.....
2,847 47	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	4,519 70	273 15	4,792 85
10,283 61	1 " " " 1917.....	2,781 47	.....	2,781 47
460 18	6 " " " 1919.....	2,298 28	315 70	2,613 98
1,577 10	.....	.....	.....	.....
1,124 86	.....	.....	.....	.....
410 39	.....	.....	.....	.....
117 35	3 years ending Oct. 31, 1919.....	325 46	13 31	338 77
14,398 18	.....	.....	.....	.....
20 48	.....	.....	.....	.....
2,126 73	1 year ending Oct. 31, 1917.....	607 48	.....	607 48
1,517 82	.....	.....	.....	.....
1,351 81	.....	.....	.....	.....
295 88	.....	.....	.....	.....
169 07	.....	.....	.....	.....
247 67	1 year ending Oct. 31, 1917.....	67 33	.....	67 33
1,393 92	.....	.....	.....	.....
1,950 85	.....	.....	.....	.....
251 85	1 year ending Oct. 31, 1917.....	122 56	.....	122 56
488 56	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	3,809 96	241 06	4,051 02
3,520 70	.....	.....	.....	.....
1,345 93	.....	.....	.....	.....
1,281 67	2 years ending Oct. 31, 1918.....	1,183 38	24 29	1,207 67
2,158 45	1 " " " 1917.....	600 52	.....	600 52
943 86	1 " " " 1917.....	349 04	.....	349 04
915 64	.....	.....	.....	.....
4,851 26	.....	.....	.....	.....
1,637 42	1 year ending Oct. 31, 1917.....	540 12	.....	540 12
3,253 20	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	14,096 61	825 78	14,922 39
2,909 51	2 " " " 1918.....	2,591 87	51 80	2,643 67
97 04	.....	.....	.....	.....
7,330 34	1 year ending Oct. 31, 1917.....	1,894 95	.....	1,894 95
901 43	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	12,758 87	754 47	13,513 34
1,321 54	2 " " " 1918.....	1,030 90	19 95	1,050 85
.....	4 " " " 1920.....	36,536 94	1,885 33	38,422 27

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act.—Sinking Fund Payments made by Certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been	
	(a) For Period of	(b) Amount	(a) For Period of	
		\$ c.		
Harriston	4 years ending Oct. 31, 1920	3,321 48	4 years ending Oct. 31, 1920	
Hensall	4 " " " "	2,285 46	4 " " " "	
Hespeler	4 " " " "	2,248 22		
Highgate	4 " " " "	1,306 99	4 years ending Oct. 31, 1920	
Ingersoll	4 " " " "	5,857 72		
Kitchener	4 " " " "	23,969 69		
Lambeth	4 " " " "	600 09	4 years ending Oct. 31, 1920	
Listowel	4 " " " "	4,446 72	4 " " " "	
London	4 " " " "	48,771 06		
London and Pt. Stanley Rly....	4 " " " "	10,368 64	3 years ending Oct. 31, 1920	
Lucan	4 " " " "	1,829 90	4 " " " "	
Lynden	4 " " " "	1,790 18	4 " " " "	
Markham.....	1 " " " "	205 61	1 " " " "	
Milton	4 " " " "	4,248 07	2 " " " "	
Milverton	4 " " " "	2,955 33	4 " " " "	
Mimico	4 " " " "	1,249 57	1 " " " "	
Mitchell	4 " " " "	2,090 85		
Moorefield	3 " " " "	695 75	3 years ending Oct. 31, 1920	
Mount Brydges ..	4 " " " "	857 59	4 " " " "	
New Hamburg ..	4 " " " "	2,205 45		
New Toronto ...	4 " " " "	15,106 77	3 years ending Oct. 31, 1920	
Niagara Falls ..	4 " " " "	1,602 28	4 " " " "	
Niagara-on-the- Lake	2 " " " "	206 35	2 " " " "	
Norwich	4 " " " "	2,151 19	1 " " " "	
Oil Springs	3 " " " "	1,292 86	3 " " " "	
Otterville	4 " " " "	472 86	4 " " " "	
Palmerston	4 " " " "	2,177 40	4 " " " "	
Paris	4 " " " "	2,625 59	3 " " " "	
Parkhill	1 " " " "	278 18	1 " " " "	
Petersburg and St. Agatha Dis..	5 " " " "	956 66	1 " " " "	
Petrolia	4 " " " "	6,032 54	4 " " " "	
Plattsville	4 " " " "	1,834 99	3 " " " "	
Port Credit	4 " " " "	431 87	1 " " " "	
Port Stanley ...	4 " " " "	2,562 92	1 " " " "	
Preston	4 " " " "	6,180 62		
Princeton	4 " " " "	650 87	3 years ending Oct. 31, 1920	
Ridgetown	4 " " " "	2,815 72	4 " " " "	
Rockwood	4 " " " "	829 49	2 " " " "	
Rodney	4 " " " "	1,106 98	4 " " " "	
St. George	4 " " " "	1,033 52	4 " " " "	
St. Jacobs	4 " " " "	683 76	4 " " " "	
St. Mary's	4 " " " "	5,041 73		

SYSTEM—Continued

Sinking Fund Requirements, Payment of which have been Deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to 31 October, 1920

the Payment Deferred	Sinking Fund Requirements (Paid or Charged) as Part of the Cost of Power		Interest at 4% per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October, 1920
	(b) Amount	(a) For Period of		
\$ c.			\$ c.	\$ c.
3,321 48	.....	.....	.....	.....
2,283 46	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	2,248 22	132 27	2,380 49
1,306 99	.....	5,857 72	348 00	6,205 72
.....	4 " " " 1920.....	23,969 69	1,335 38	25,305 07
600 09	.....	.....	.....	.....
4,446 72	.....	48,771 06	2,863 73	51,634 79
.....	4 years ending Oct. 31, 1920.....	.....	.....	.....
7,821 74	1 " " " 1917.....	2,546 90	.....	2,546 90
1,829 90	.....	.....	.....	.....
1,790 18	.....	.....	.....	.....
205 61	.....	.....	.....	.....
2,390 20	2 years ending Oct. 31, 1918.....	1,857 87	37 76	1,895 63
2,955 33	.....	.....	.....	.....
386 35	3 years ending Oct. 31, 1919.....	863 22	34 63	897 85
.....	4 " " " 1920.....	2,090 85	127 08	2,217 93
695 75	.....	.....	.....	.....
857 59	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	2,205 45	130 84	2,336 29
13,929 02	1 " " " 1917.....	1,177 75	.....	1,177 75
1,602 28	.....	.....	.....	.....
206 35	.....	.....	.....	.....
563 44	3 years ending Oct. 31, 1919.....	1,587 75	68 74	1,656 49
1,292 86	.....	.....	.....	.....
472 86	.....	.....	.....	.....
2,177 40	.....	.....	.....	.....
2,201 45	1 year ending Oct. 31, 1917.....	424 14	.....	424 14
278 18	.....	.....	.....	.....
246 19	4 years ending Oct. 31, 1919.....	710 47	50 69	761 16
6,032 54	.....	.....	.....	.....
1,373 14	1 year ending Oct. 31, 1917.....	461 85	.....	461 85
138 02	3 " " " 1919.....	293 85	11 81	305 66
677 74	3 " " " 1919.....	1,885 18	77 15	1,962 33
.....	4 " " " 1920.....	6,180 62	333 80	6,514 42
463 91	1 " " " 1917.....	186 96	.....	186 96
2,815 72	.....	.....	.....	.....
443 89	2 years ending Oct. 31, 1918.....	385 60	6 74	392 34
1,106 98	.....	.....	.....	.....
1,033 52	.....	.....	.....	.....
683 76	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	5,041 73	282 78	5,324 51

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act.—Sinking Fund Payments made by Certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been
	(a) For Period of	(b) Amount	(a) For Period of
		\$ c.	
St. Thomas	4 years ending Oct. 31, 1920	15,014 99	.....
Sarnia	4 " " " "	27,871 00	4 years ending Oct. 31, 1920
Scarboro Twp....	1 " " " "	178 28	1 " " " "
Seaforth	4 " " " "	6,028 57	.....
Simcoe	4 " " " "	1,335 36	4 years ending Oct. 31, 1920
Springfield	4 " " " "	631 43	4 " " " "
Stamford Twp. .	4 " " " "	478 03	4 " " " "
Stratford	4 " " " "	12,727 71	.....
Strathroy	4 " " " "	5,074 80	3 years ending Oct. 31, 1920
Streetsville.....	1 " " " "	588 05	.....
Tavistock	4 " " " "	2,996 78	4 years ending Oct. 31, 1920
Thamesford	4 " " " "	1,355 98	3 " " " "
Thamesville	4 " " " "	1,233 82	4 " " " "
Thorndale	4 " " " "	1,692 32	3 " " " "
Tilbury	4 " " " "	1,903 97	4 " " " "
Tillsonburg	4 " " " "	5,569 10	.....
Toronto	4 " " " "	178,063 50	.....
Toronto Twp. ...	4 " " " "	962 96	2 years ending Oct. 31, 1920
Walkerville	4 " " " "	43,365 67	3 " " " "
Wallaceburg	4 " " " "	8,677 11	4 " " " "
Waterdown	4 " " " "	1,005 62	.....
Waterford	4 " " " "	1,313 00	4 years ending Oct. 31, 1920
Waterloo	4 " " " "	5,196 73	.....
Watford	4 " " " "	2,342 38	4 years ending Oct. 31, 1920
Welland	4 " " " "	8,141 81	4 " " " "
Wellesley	4 " " " "	1,961 49	4 " " " "
West Lorne	4 " " " "	833 35	4 " " " "
Weston	4 " " " "	4,930 50	.....
Windsor	4 " " " "	37,319 96	3 years ending Oct. 31, 1920
Woodbridge	4 " " " "	1,474 93	3 " " " "
Woodstock	4 " " " "	6,231 42	.....
Wyoming	4 " " " "	1,019 77	4 years ending Oct. 31, 1920
Zurich	4 " " " "	1,786 15	4 " " " "
Totals			
Municipalities		742,427 65	.....
Essex System..	2 " " " "	4,741 56	1 year ending Oct. 31, 1919
Companies		204,465 41	.....
Grand Totals		951,634 62	.....

SYSTEM—Continued

Sinking Fund Requirements, Payment of which has been deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to October 31, 1920

the Payment Deferred	Sinking Fund Requirements Paid (or Charged) as Part of the Cost of Power		Interest at 4 % per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October 1920
	(a) For Period of	(b) Amount		
\$ c.		\$ c.	\$ c.	\$ c.
.....	4 years ending Oct. 31, 1920.....	15,014 99	905 01	15,920 00
27,871 00	.....	.....	.....	.....
178 28	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	6,028 57	410 38	6,438 95
1,335 36	.....	.....	.....	.....
631 43	.....	.....	.....	.....
478 03	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	12,727 71	775 83	13,503 54
3,885 20	1 " " " 1917.....	1,189 60	.....	1,189 60
.....	1 " " " 1920.....	588 05	.....	588 05
2,996 78	.....	.....	.....	.....
1,097 17	1 year ending Oct. 31, 1917.....	258 81	.....	258 81
1,233 82	.....	.....	.....	.....
1,174 48	1 year ending Oct. 31, 1917.....	517 84	.....	517 84
1,903 97	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	5,569 10	308 10	5,877 20
.....	4 " " " 1920.....	178,063 50	10,180 03	188,243 53
581 18	2 " " " 1918.....	381 78	6 51	388 29
29,578 48	1 " " " 1917.....	13,787 19	.....	13,787 19
8,677 11	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	1,005 62	58 13	1,063 75
1,313 00	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	5,196 73	301 21	5,497 94
2,342 38	.....	.....	.....	.....
8,141 81	.....	.....	.....	.....
1,961 49	.....	.....	.....	.....
833 35	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	4,930 50	274 59	5,205 09
26,834 82	1 " " " 1917.....	10,485 14	.....	10,485 14
1,172 61	1 " " " 1917.....	302 32	.....	302 32
.....	4 " " " 1920.....	6,231 42	366 28	6,597 70
1,019 77	.....	.....	.....	.....
1,786 15	.....	.....	.....	.....
280,979 34	.....	461,448 31	23,994 69	485,443 00
1,821 08	1 year ending Oct. 31, 1920.....	2,920 48	.....	2,920 48
.....	.....	204,465 41	23,083 47	227,548 88
282,800 42	.....	668,834 20	47,078 16	715,912 36

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Acton	Jan., 1913	2,437 39	.....
Ailsa Craig	Jan., 1916	1,219 01	.....
Aylmer	Mar., 1918	.....	583 68
Ayr	Jan., 1915	.....	1,991 28
Baden	May, 1912	2,268 75	.....
Beachville	Aug., 1912	4,966 45	.....
Blenheim	Nov., 1915	.....	3,230 25
Bolton	Feb., 1915	.....	4,785 94
Bothwell	Sept., 1915	.....	3,987 14
Brampton	Nov., 1911	16,921 43	.....
Brantford	Feb., 1914	8,925 96	.....
Brigden	Jan., 1918	.....	1,382 91
Burford	June, 1915	.....	3,162 87
Burgessville	Nov., 1916	721 12	.....
Caledonia	Oct., 1912	300 04	.....
Chatham	Feb., 1915	1,670 51	.....
Clinton	Mar., 1914	.....	1,096 00
Comber	May, 1915	.....	4,466 34
Chippawa	Sept., 1919	.....	93 42
Dashwood	Sept., 1917	247 07	.....
Delaware	May, 1915	.....	436 33
Dereham Twp.	Sept., 1919	.....	224 84
Dorchester	Dec., 1914	652 49	.....
Drayton	Mar., 1918	.....	510 46
Dresden	April, 1915	.....	636 33
Drumbo	Dec., 1914	.....	953 79
Dublin	Oct., 1917	.....	395 88
Dundas	Jan., 1911	.....	1,055 87
Dunnville	June, 1918	.....	6,788 99
Dutton	Sept., 1915	.....	74 66
Elmira	Nov., 1913	355 80	.....
Elora	Nov., 1914	.....	1,055 42
Embro	Jan., 1915	.....	3,815 80
Etobicoke Twp.	Aug., 1917	2,083 36	.....
Exeter	June, 1916	.....	2,903 84
Fergus	Nov., 1914	.....	1,633 80
Forest	Mar., 1917	.....	361 01
Galt	May, 1911	28,200 74	.....
Glencoe	Aug., 1920	.....	.....
Georgetown	Sept., 1913	1,929 61	.....
Goderich	Feb., 1914	.....	10,336 47
Granton	July, 1916	.....	347 69
Guelph	Dec., 1910	26,066 37	.....
Hagersville	Sept., 1913	.....	1,360 50
Hamilton	Feb., 1911	619 02	.....

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during - the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	97 50	.....	574 25	.....	3,109 14	.....
.....	48 76	.....	1,265 10	.....	2,532 87	.....
583 68	1,017 18	.....	1,017 18
723 21	68 38	203 56	.....	.....	1,132 89
.....	90 75	.....	285 76	.....	2,645 26	.....
.....	198 66	.....	.....	642 09	4,523 02	.....
1,024 00	96 03	317 98	.....	.....	1,984 30
.....	191 44	1,306 55	.....	.....	3,670 83
1,567 02	140 07	1,067 32	.....	.....	1,492 87
.....	676 86	.....	71 88	.....	17,670 17	.....
.....	357 04	.....	.....	4,971 49	4,311 51	.....
.....	55 32	432 80	.....	.....	1,005 43
.....	126 51	100 96	.....	.....	3,188 42
.....	28 85	.....	.....	16 30	733 67	.....
.....	12 00	.....	99 95	.....	411 99	.....
.....	66 82	.....	8,973 45	.....	10,710 78	.....
1,117 92	21 92	.....	376 92	.....	376 92
.....	178 65	707 31	.....	.....	3,937 68
.....	3 74	787 92	.....	690 76	.....
.....	9 88	.....	161 39	.....	418 34	.....
.....	17 45	192 95	.....	.....	260 83
.....	8 99	.....	81 78	.....	315 61
.....	26 10	.....	186 61	.....	865 20	.....
510 46	129 89	.....	129 89
.....	25 45	1,394 28	.....	732 50	.....
100 00	37 08	231 75	31 34	.....	659 12
.....	15 83	.....	32 34	.....	443 05
.....	42 23	.....	2,593 63	.....	3,691 73
2,062 26	271 56	.....	1,934 32	.....	6,932 61
74 66	477 82	.....	477 82	.....
.....	14 23	.....	931 21	.....	1,301 24	.....
1,068 96	13 54	972 71	.....	972 71	.....
763 15	138 09	.....	14 60	.....	3,205 34
.....	83 33	.....	1,717 84	.....	3,884 53	.....
2,977 15	73 31	382 42	.....	382 42	.....
.....	65 35	44 05	.....	.....	1,655 10
.....	14 44	1,000 68	.....	625 23	.....
.....	1,128 03	.....	.....	1,776 05	27,552 72	.....
.....	200 32	.....	200 32	.....
.....	77 18	.....	1,525 20	.....	3,531 99	.....
5,335 97	286 69	.....	3,180 09	.....	8,467 28
.....	13 91	222 37	.....	.....	139 23
.....	1,042 65	.....	.....	2,674 69	24,434 33	.....
1,020 00	35 95	893 96	.....	517 51	.....
.....	24 76	.....	.....	25,056 63	.....	24,412 85

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Harriston	July 1916	.....	4,426 38
Hensall	Jan 1917	.....	1,589 06
Hespeler	Feb., 1911	5,319 54	.....
Highgate	Dec., 1916	.....	594 88
Ingersoll	May, 1911	12,252 82	.....
Kitchener	Jan., 1911	27,942 60	.....
Lambeth	April, 1915	.....	873 90
Listowel	June, 1916	778 15	.....
London	Jan., 1911	106,334 71	.....
London and Port Stanley Railway	Aug., 1914	.....	23,325 11
Lucan	Feb., 1915	2,601 88	.....
Lynden	Feb., 1915	.....	3,205 52
Milton	April, 1913	.....	662 97
Milverton	June, 1916	977 27	.....
Mimico	May, 1912	3,286 33	.....
Mitchell	Sept., 1911	1,708 89	.....
Moorefield	Mar., 1918	.....	205 17
Mount Brydges	Mar., 1915	.....	416 78
Markham	Apr., 1920	.....	.....
Niagara-on-the-Lake	Aug., 1919	47 72	.....
Niagara Falls	Dec., 1915	7,276 83	.....
New Hamburg	Mar., 1911	.....	2,255 16
New Toronto	Feb., 1914	29,644 64	.....
Norwich	May 1912	2,003 65	.....
Oil Springs	Feb., 1918	.....	514 79
Otterville	Feb., 1916	122 81	.....
Palmerston	July 1916	.....	1,847 78
Paris	Feb., 1914	3,303 56	.....
Parkhill	May 1920	.....	.....
Petrolia	May 1916	.....	2,707 59
Plattsville	Dec., 1914	.....	4,330 51
Port Credit	Aug., 1912	1,753 99	.....
Port Stanley	Apr. 1912	.....	491 60
Preston	Jan., 1911	15,913 87	.....
Princeton	Jan., 1915	.....	1,528 63
Ridgetown	Dec., 1915	505 69	.....
Rockwood	Sep., 1913	.....	1,543 92
Rodney	Feb., 1917	296 19	.....
St. George	Sep., 1915	58 44	.....
St. Jacobs	Sep., 1917	154 71	.....
St. Mary's	May 1911	1,688 37	.....
St. Thomas	Apr., 1911	24,718 14	.....
Sarnia	Dec., 1916	6,317 28	.....
Seaforth	Nov. 1911	7,956 19	.....
Scarboro Township	Aug., 1918	.....	.....

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	177 06	1,154 75	.....	.....	3,448 69
1,149 06	41 65	.....	17 11	.....	498 76
.....	212 78	.....	.....	554 57	4,977 75	.....
594 88	27 76	.....	27 76
.....	490 11	.....	.....	1,025 78	11,717 15	.....
.....	1,117 70	.....	.....	4,024 00	25,036 30	.....
.....	34 96	443 33	.....	.....	465 53
.....	787 27	20 08	.....	1,212 42	.....	1,223 38	.....
.....	4,253 39	.....	.....	10,497 53	100,090 57	.....
24,013 33	688 22	.....	1,802 05	.....	1,802 05
.....	104 08	.....	1,776 87	.....	4,482 83	.....
1,126 80	124 35	714 45	.....	.....	1,488 62
.....	26 52	2,737 20	.....	2,047 71	.....
.....	39 09	.....	753 91	.....	1,770 27	.....
.....	131 45	.....	344 65	.....	3,762 43	.....
.....	68 36	.....	408 34	.....	2,185 59	.....
205 17	103 33	.....	103 33	.....
402 19	9 43	67 55	.....	43 53	.....
.....	191 47	.....	191 47	.....
.....	1 91	.....	388 63	.....	438 26	.....
.....	291 07	.....	.....	2,488 61	5,079 29	.....
1,089 23	71 23	254 38	.....	.....	982 78
.....	1,185 79	.....	.....	3,904 46	26,925 97	.....
.....	80 15	.....	784 65	.....	2,868 45	.....
.....	20 59	283 74	.....	.....	251 64
.....	4 91	.....	213 85	.....	341 57	.....
.....	73 91	1,262 37	.....	.....	659 32
.....	132 14	.....	.....	893 59	2,542 11	.....
.....	53 53	.....	53 53	.....
.....	108 30	2,685 44	.....	.....	130 45
2,000 00	137 03	1,050 69	.....	.....	1,416 85
.....	70 16	.....	.....	30 99	1,793 16	.....
457 55	11 13	1,364 06	.....	1,318 88	.....
.....	636 55	.....	.....	3,435 10	13,115 32	.....
750 00	57 08	.....	209 80	.....	1,045 51
.....	505 69	.....	.....	1,037 50	.....	1,037 50	.....
.....	61 76	155 48	.....	.....	1,450 20
.....	11 85	.....	1,035 03	.....	1,343 07	.....
.....	2 34	.....	122 66	.....	183 44	.....
.....	42 05	5 60	.....	102 04	.....	220 30	.....
.....	67 53	.....	.....	2,182 57	.....	426 67
.....	988 73	.....	81 55	.....	25,788 42	.....
177 37	255 84	.....	16,398 50	.....	23,148 99	.....
.....	318 25	.....	.....	114 60	8,159 84	.....
.....	673 11	.....	673 11

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Simcoe	Apr., 1915	3,479 07	.....
Springfield	Aug., 1917	337 96	.....
Stamford Township	Nov., 1916	3,555 12	.....
Stratford	Jan., 1911	25,401 19	.....
Strathroy	Dec., 1914	8,664 40	.....
Streetsville .....	.....	.....	.....
Tavistock	Nov., 1916	3,666 36	.....
Thamesford	Feb., 1914	.....	1,496 05
Thamesville	Oct., 1915	.....	2,025 13
Thorndale	Mar., 1914	.....	1,288 82
Tilbury	Apr., 1915	.....	5,258 98
Tillsonburg	Aug., 1911	3,129 01	.....
Toronto	June 1911	27,435 97	.....
Toronto Twp.	Aug., 1913	706 34	.....
Walkerville	Nov., 1914	6,146 63	.....
Wallaceburg	Feb., 1915	.....	2,159 69
Waterdown	Nov., 1911	.....	1,289 17
Waterford	Apr., 1915	2,662 20	.....
Waterloo	Dec., 1910	8,763 88	.....
Watford	Sep., 1917	.....	3,867 35
Welland	Sep., 1917	9,448 82	.....
Wellesley	Nov., 1916	1,074 97	.....
West Lorne	Jan., 1917	381 82	.....
Weston	Aug., 1911	8,986 87	.....
Windsor	Oct., 1914	.....	11,127 54
Woodbridge	Dec., 1914	244 68	.....
Woodstock	Jan., 1911	19,020 65	.....
Wyoming	Nov., 1916	.....	2,107 67
Zurich	Sep., 1917	1,293 03	.....
Breslau District	Dec., 1913	.....	2,425 27
Petersburg and St. Agatha District	Sep., 1913	.....	510 91
H. E. P. C. Service Building .....	.....	.....	.....
		496,948 36	141,747 84

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	139 16	.....	865 34	.....	4,483 57	.....
.....	13 52	.....	79 31	.....	430 79	.....
.....	142 20	.....	.....	343 89	3,353 43	.....
.....	1,016 05	.....	.....	2,575 43	23,841 81	.....
.....	346 58	.....	1,099 20	.....	10,110 18	.....
.....	2,626 88	.....	2,626 88	.....
.....	146 65	.....	646 78	.....	4,459 79	.....
750 00	46 44	983 98	.....	191 49	.....
75 77	80 15	746 24	.....	.....	1,283 27
.....	51 55	386 63	.....	.....	953 74
619 55	199 18	950 38	.....	.....	3,888 23
.....	125 16	.....	146 63	.....	3,400 80	.....
.....	1,097 44	.....	.....	138,271 55	.....	109,738 14
.....	28 25	.....	249 81	.....	984 40	.....
.....	245 86	.....	13,386 46	.....	19,778 95	.....
.....	86 39	6,505 02	.....	4,258 94	.....
1,289 17	549 62	.....	549 62
.....	106 49	.....	657 61	.....	3,426 30	.....
.....	350 56	.....	.....	235 80	8,878 64	.....
1,022 90	136 97	.....	200 24	.....	3,181 66
.....	282 59	385 80	.....	.....	2,645 49	6,906 54	.....
.....	43 00	.....	242 87	.....	1,360 84	.....
.....	15 27	.....	1,159 48	.....	1,556 57	.....
.....	122 48	359 47	.....	892 85	.....	10,116 71	.....
.....	445 10	15,444 87	.....	3,872 23	.....
.....	9 79	.....	.....	71 16	183 31	.....
.....	760 83	.....	.....	1,387 87	18,393 61	.....
.....	84 31	276 81	.....	.....	1,915 17
.....	51 72	.....	317 75	.....	1,662 50	.....
.....	97 01	.....	907 02	.....	3,429 30
.....	20 44	.....	691 93	.....	1,223 28
.....
54,651 41	1,740 08	19,857 06	4,832 69	111,577 62	224,258 63	519,504 72	209,049 51

NIAGARA RURAL LINES.

Statement showing "Cost of Power," "Operating Expenses," "Fixed Charges,"
and "Revenue," and the Net "Surplus" or "Deficit" on each Line for the
year ending October 31, 1920.

NIAGARA

Statement showing "Cost of Power," "Operating Expenses," "Fixed Charges"
the year ending

Lines Operated by	Capital Cost	Cost of Power to Commission	Operation, Mainten- ance and Adminis- tration Expenses	Interest
	\$ c.	\$ c.	\$ c.	\$ c.
Ancaster Township	5,159 03	.....	.....	257 96
Bolton	2,110 45	.....	.....	105 52
Bothwell	6,571 84	.....	.....	355 88
Brampton	588 87	.....	.....	29 44
Chatham	898 18	.....	.....	44 90
Dereham Township	29,243 50	.....	.....	1,483 42
Elora	777 82	.....	.....	38 90
Etobicoke	54,608 68	.....	.....	2,984 10
Georgetown	8,889 59	.....	.....	444 48
Goderich	2,313 36	.....	.....	115 66
Lucan	333 26	.....	.....	16 66
Milton	813 82	.....	.....	40 70
Norwich	32,978 23	.....	.....	1,673 26
Preston	9,155 08	.....	.....	457 76
St. Thomas	1,933 82	.....	.....	96 20
Scarboro Township	26,125 24	469 40	186 60	1,928 29
Springfield	4,561 39	.....	.....	234 93
Stratford	4,058 47	.....	.....	202 92
Toronto	41,167 92	.....	.....	2,058 40
Toronto Township	43,309 37	.....	.....	2,165 46
Vaughan Township	21,592 88	.....	.....	1,209 96
Walkerville	41,148 83	.....	.....	1,981 30
Waterdown	11,825 24	.....	.....	591 26
Waterford	3,399 87	.....	.....	181 82
Waterloo	5,062 60	.....	.....	230 60
Weston	5,234 46	.....	.....	209 38
Windsor	8,767 56	.....	.....	422 58
Woodstock	1,088 20	.....	.....	54 42
Welland	30,136 86	4,368 59	.....	1,506 83
St. Catharines	7,500 00	50,327 28	107 44	300 00
Grantham Township	28,289 47	482 24	17 51	1,429 13
Louth Township	2,771 19	.....	.....	138 56
Port Colborne .....	.....	3,157 37	121 87	.....
Lines Operated by the Hydro-Electric Power Commission of Ontario:				
Don Mills Road	9,861 42	374 87	387 00	395 36
Brady & Raymond	817 18	.....	1 60	32 67
Wm. Pullen	74 15	.....	.....	2 96
Innes, Karn & Longworth	2,875 20	.....	50 26	115 01
W. G. Bailey	599 21	.....	.....	23 97
Port Dalhousie	5,834 33	2,068 07	147 32	233 37
Non-operating Capital	13,189 39	.....	.....	.....
Totals	475,665 96	61,247 82	1,019 60	23,794 02

RURAL LINES

and "Revenue," and the Net "Surplus" or "Deficit" on each Line for
October 31, 1920

Fixed Charges		Total Cost of Power, Operat- ing Expenses, Fixed Charges and Interest	Revenue from Muni- cipalities	Net Surplus or Deficit for Year	
Renewals	Sinking Fund			Surplus	Deficit
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	92 86	350 82	350 82	.....	.....
.....	37 98	143 50	143 50	.....	.....
.....	547 44	903 32	903 32	.....	.....
.....	10 60	40 04	40 04	.....	.....
.....	16 16	61 06	61 06	.....	.....
.....	526 36	2,009 78	2,009 78	.....	.....
.....	14 00	52 90	52 90	.....	.....
.....	982 96	3,967 06	3,967 06	.....	.....
.....	160 00	604 48	604 48	.....	.....
.....	41 64	157 30	157 30	.....	.....
.....	6 00	22 66	22 66	.....	.....
.....	14 64	55 34	55 34	.....	.....
.....	602 38	2,275 64	2,275 64	.....	.....
.....	164 80	622 56	622 56	.....	.....
.....	34 64	130 84	130 84	.....	.....
8 42	592 57	3,185 28	3,194 81	9 53	.....
.....	105 49	340 42	340 42	.....	.....
.....	73 04	275 96	275 96	.....	.....
.....	741 02	2,799 42	2,799 42	.....	.....
.....	779 56	2,945 02	2,945 02	.....	.....
.....	388 68	1,598 64	1,598 64	.....	.....
.....	723 09	2,704 39	2,704 39	.....	.....
.....	212 86	804 12	804 12	.....	.....
.....	65 46	247 28	247 28	.....	.....
.....	91 14	321 74	321 74	.....	.....
.....	94 22	303 60	303 60	.....	.....
.....	152 12	574 70	574 70	.....	.....
.....	19 58	74 00	74 00	.....	.....
.....	542 46	6,417 88	6,445 25	27 37	.....
.....	135 00	50,869 72	50,896 57	26 85	.....
.....	514 50	2,443 38	2,449 92	6 54	.....
.....	49 88	188 44	188 44	.....	.....
.....	.....	3,279 24	3,400 25	121 01	.....
.....	.....	.....	.....	191 30	.....
395 36	177 51	1,730 10	972 67	.....	757 43
32 67	14 71	81 65	113 40	31 75	.....
2 96	1 33	7 25	96 00	88 75	.....
115 01	51 75	332 03	411 80	79 77	.....
23 97	10 79	58 73	120 78	62 05	.....
233 37	105 02	2,787 15	2,807 31	20 16	.....
.....
811 76	8,894 24	95,767 44	95,483 79	473 78	757 43

Surpluses placed to credit of Municipalities \$191 30
Net deficit on lines operated by the Commission 474 95

NIAGARA RURAL LINES

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919	\$4,946 78	
Deduct expenditures to 31st October, 1919	673 10	
		\$4,273 68
Amounts added during year ending 31st October, 1920:		
Amounts charged Municipalities on lines operated by the		
Commission as part of the cost of power delivered		
to them	811 76	
Interest at 4% per annum on the monthly balances to		
the credit of the account	170 95	
		982 71
Expenditures during the year ending 31st October, 1920		\$5,256 39
		6 60
Balance carried forward 31st October, 1920		\$5,249 79

NIAGARA RURAL LINES.

Statement showing the Total Sinking Fund Requirements on each Line—all of which have been paid—and the Total of such Sinking Fund Payments, with interest allowed thereon, to October 31, 1920.

NIAGARA

Statement showing the Total Sinking Fund Requirements on each line—
with interest allowed thereon

Lines operated by	Sinking Fund Requirements	
	Period Covered	Amount
Ancaster Twp.	7 yrs. ending 31st Oct., 1920, inclusive	\$ c. 635 45
Baden	8 " " "	157 34
Bolton	6 " " "	161 93
Bothwell	5 " " "	1,755 05
Brampton	3 " " "	33 56
Chatham	5 " " "	77 74
Dereham Twp.	3 " " "	1,454 53
Elora	7 " " "	83 91
Etobicoke	5 " " "	2,857 72
Georgetown	7 " " "	944 99
Goderich	7 " " "	266 62
Grantham Twp.	6 " " "	2,695 18
London Abattoir	7 " " "	60 94
Louth Twp.	2 " " "	99 76
Lucan	1 " " "	6 00
Milton	7 " " "	88 56
Mimico	8 " " "	921 33
New Toronto	7 " " "	168 28
Norwich	8 " " "	3,175 97
Port Dalhousie	9 " " "	693 36
Preston	8 " " "	1,241 22
St. Catharines	7 " " "	888 75
St. Thomas	7 " " "	207 77
Scarboro Twp.	3 " " "	1,466 31
South Dorchester Twp.	4 " " "	100 06
Springfield	1 " " "	105 49
Stratford	8 " " "	504 73
Thamesford	6 " " "	6 32
Thorndale	7 " " "	5 57
Toronto	8 " " "	4,439 51
Toronto Twp.	8 " " "	4,488 22
Vaughan Twp.	6 " " "	1,063 87
Walkerville	6 " " "	3,366 23
Waterdown	7 " " "	1,298 94
Waterford	6 " " "	219 74
Waterloo	7 " " "	422 18
Welland	8 " " "	3,539 06
Weston	7 " " "	800 42
Windsor	5 " " "	646 52
Woodstock	8 " " "	124 62
<i>Lines Operated by the Commission.</i>		
Don Mills Road	7 " " "	1,012 98
Brady & Raymond	7 " " "	108 34
W. Pullen	7 " " "	8 37
Innes, Karn & Longworth	8 " " "	393 29
Bailey's Farm	7 " " "	64 71
		42,861 44

RURAL LINES

all of which have been paid—and the Total of such Sinking Fund Payments to 31st October, 1920

Sinking Fund Paid		Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund payments and accumulated interest to 31st October, 1920
Period Covered	Amount		
	\$ c.	\$ c.	\$ c.
Full period	635 45	92 03	727 48
"	157 34	37 36	194 70
"	161 93	12 72	174 65
"	1,755 05	83 55	1,838 60
"	33 56	1 87	35 43
"	77 74	6 20	83 94
"	1,454 53	55 43	1,509 96
"	83 91	8 84	92 75
"	2,857 72	113 23	2,970 95
"	944 99	102 40	1,047 39
"	266 62	30 01	296 63
"	2,695 18	247 46	2,942 64
"	60 94	10 35	71 29
"	99 76	4 32	104 08
"	6 00	.....	6 00
"	88 56	9 32	97 88
"	921 33	169 89	1,091 22
"	168 23	28 74	197 02
"	3,175 97	294 84	3,470 81
"	693 36	68 41	761 77
"	1,241 22	171 31	1,412 53
"	838 75	106 34	995 09
"	207 77	21 90	229 67
"	1,466 31	42 10	1,508 41
"	100 06	6 18	106 24
"	105 49	.....	105 49
"	504 73	63 88	568 61
"	6 32	1 21	7 53
"	5 57	90	6 47
"	4,439 51	475 34	4,914 85
"	4,488 22	480 49	4,968 71
"	1,063 87	38 30	1,102 17
"	3,366 23	279 33	3,645 56
"	1,298 94	142 83	1,441 77
"	219 74	10 86	230 60
"	422 18	35 75	457 93
"	3,539 06	380 38	3,919 44
"	800 42	98 35	898 77
"	646 52	42 25	688 77
"	124 62	14 40	139 02
"	1,012 98	94 99	1,107 97
"	108 34	12 03	120 37
"	8 37	84	9 21
"	393 29	44 41	437 70
"	64 71	6 33	71 04
.....	42,861 44	3,947 67	46,809 11

NIAGARA

Statement Showing the Surplus or Deficit on each Line at 31st October,
Year ending 31st October, 1920, and the Net

Municipality	Date Commenced Operation	Surplus or Deficit at October 31, 1919	
		Surplus	Deficit
		\$ c.	\$ c.
Grantham Twp.....	May, 1915	.....	8 90
St. Catharines	Apr., 1914	.....	25 82
Scarboro Township.....	Aug., 1918	.....	9 17
Welland.....	Mar., 1913	27 08	.....
Port Colborne.....	Mar., 1920	.....	.....
Lines Operated by Commission:			
Don Mills Road.....	Nov., 1914	.....	3,474 58
Brady & Raymond.....	Oct., 1914	237 33	.....
Wm. Pullen	May, 1914	546 80	.....
Innes, Karn & Longworth.....	Feb., 1913	373 12	.....
W. G. Bailey	Oct., 1914	89 83	.....
Port Dalhousie	Nov., 1912	119 42	.....
		1,393 58	3,518 47

RURAL LINES

1919, and Interest added during the year ; also the Surplus or Deficit for the Surplus or Deficit at 31st October, 1920

Interest on Surplus or Deficit at 4% per annum added during the year		Surplus or Deficit for the year ending 31st October, 1920		Net Surplus or Deficit on October 31, 1920	
Credited	Charged	Surplus	Deficit	Surplus	Deficit
\$.c	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	36	6 54	.....	.....	2 72
.....	1 03	26 85	.....	.....	.....
.....	36	9 53	.....	.....	.....
1 08	.....	27 37	.....	55 53	.....
.....	.....	121 01	.....	121 01	.....
				176 54	2 72
.....	138 98	.....	757 43	.....	4,370 99
9 49	.....	31 75	.....	278 57	.....
21 87	.....	88 75	.....	657 42	.....
14 92	.....	79 77	.....	467 81	.....
3 59	.....	62 05	.....	155 47	.....
4 78	.....	20 16	.....	144 36	.....
55 73	140 73	473 78	757 43	1,880 17	4,373 71
Balances owing to municipalities				\$176 54	
" " by "				2 72	
				\$173 82	
Net deficit to 31st October, 1920, on lines operated by the Commission....				2,667 36	

SEVERN SYSTEM.

Statement showing the Amount to be paid by each Municipality as the Cost under Section 23 of the Act—of Power supplied to it by the Commission—the Amount received by the Commission from each Municipality on account of such Cost—and the amount credited or charged to each Municipality upon ascertaining by annual adjustment the cost of Power supplied to it, in the year ending October 31, 1920.

SEVERN

Statement showing the Amount to be paid by each Municipality as the Cost under Section Commission from each Municipality on account of such Cost—and the amount the cost of Power supplied to it, in

Municipality	Interim Rates per Horse Power Collected by Commission during Year		Share of Capital Cost of System on which Interest and fixed Charges are Payable	Average Horse Power Supplied in Year after Correction for Power Factor	Cost of Power Purchased from Eugenia and Wasdell Systems	Share of Operating and Fixed		
	To Jan. 1/20	To Oct. 31/20				Operating, Maintenance and Administrative Expenses	Interest	Renewals
Alliston.....	\$ c. 40 00	\$ c. 50 00	\$ c. 80,482 68	132.	\$ c. 298 03	\$ c. 2,642 17	\$ c. 3,614 02	\$ c. 2,181 66
Barrie.....	29 00	29 00	138,014 41	665.8	1,503 23	6,647 89	6,265 34	3,782 18
Beeton.....	45 00	85 00	64,702 44	88.3	199 36	1,948 33	2,944 34	1,777 40
Bradford.....	47 00	75 00	52,992 02	41.	92 57	1,364 19	2,411 45	1,455 70
Coldwater.....	40 00	50 00	16,373 35	56.8	128 24	677 56	745 36	449 95
Collingwood...	28 00	28 00	323,451 85	1,336.9	3,018 47	17,394 53	14,708 85	8,879 24
Cookstown	35 00	60 00	26,538 56	61.1	137 95	1,092 73	1,206 88	728 55
Creemore	60 00	65 00	23,313 03	46.1	104 08	1,084 66	1,058 46	638 96
Elmvale	31 00	37 00	29,582 69	141.2	318 80	1,491 07	1,340 10	808 97
Midland	20 00	28 00	208,910 07	1,112.5	2,511 79	8,013 76	9,498 41	5,733 87
Penetang.....	22 00	32 00	157,890 48	839.9	1,896 31	6,334 57	7,185 65	4,337 74
Port McNicoll.	35 00	85 00	9,071 10	33.9	76 54	867 38	412 93	249 27
Stayner.....	35 00	40 00	31,149 91	120.	270 93	1,685 84	1,409 92	851 10
Thornton.....	43 00	85 00	10,996 55	11.1	25 06	370 04	500 53	302 15
Tottenham.....	51 00	85 00	32,050 83	28.4	64 12	1,121 35	1,459 00	880 75
Victoria H'rbour	35 00	50 00	13,502 43	48.9	110 40	843 32	614 68	371 06
Waubauskene..	30 00	45 00	6,846 94	24.8	55 99	307 87	310 24	187 28
Totals—								
Municipalities .....	.....	.....	1,225,869 34	.....	10,811 87	53,887 24	55,686 16	33,615 83
Companies. . .	.....	.....	155,361 80	.....	2,041 04	6,052 41	7,068 84	4,267 22
Non-Operating Capital.....	.....	.....	43 30	.....	.....	.....	.....	.....
Grand Total	.....	.....	1,381,274 44	.....	12,852 91	59,939 65	62,755 00	37,883 05

SYSTEM

23 of the Act—of Power supplied to it by the Commission—the Amount received by the credited or charged to each Municipality upon ascertaining by annual adjustment the year ending 31st October, 1920.

Costs Charges	Sinking Fund	Total Cost of Power for year as Provided to be Paid under Sec- tion 23 of Act	Amount Paid by Municipal- ities to Commis- sion in res- pect of Power Supplied in Year	Profit from Sale of Power to Com- panies Credited to Munic- ipalities in propor- tion to their Mainten- ance costs	Total Revenue from each Municip- ality	Amount Credited or Charged to each Municipality upon ascertaining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
						Credited	Charged	
\$ c. 33 00	\$ c.	\$ c. 8,768 88	\$ c. 6,508 68	\$ c. 195 50	\$ c. 6,704 18	\$ c.	\$ c. 2,064 70	\$ c.
166 45	1,377 66	19,742 75	19,309 40	409 92	19,719 32	.....	23 43	1917-18
22 07	.....	6,891 50	6,542 11	150 30	6,692 41	.....	199 09	.....
10 25	.....	5,334 16	2,883 72	110 00	2,993 72	.....	2,340 44	.....
14 20	204 36	2,219 67	2,544 75	30 52	2,575 27	355 60	.....	1917-18
334 22	4,978 30	49,313 61	37,433 18	812 85	38,246 03	.....	11,067 58	1917-18
15 27	.....	3,181 38	3,239 87	75 54	3,315 41	134 03	.....	.....
11 52	394 12	3,291 80	2,789 49	76 75	2,866 24	.....	425 56	1916-17
35 30	354 55	4,348 79	4,823 78	60 05	4,883 83	535 04	.....	1917-18
278 12	2,842 84	28,878 79	29,660 39	367 57	30,027 96	1,149 17	.....	1917-18
209 97	2,839 24	22,803 48	25,127 99	319 20	25,447 19	2,643 71	.....	1919-20
8 47	100 61	1,715 20	2,558 66	44 33	2,602 99	887 79	.....	1916-17
30 00	320 81	4,568 60	4,628 99	90 78	4,719 77	151 17	.....	1917-18
2 77	.....	1,200 55	867 27	25 04	892 31	.....	308 24	.....
7 10	.....	3,532 30	2,254 16	69 89	2,324 05	.....	1,208 25	.....
12 22	152 22	2,103 90	2,313 58	46 03	2,359 61	255 71	.....	1916-17
6 20	81 41	948 99	1,052 61	12 77	1,065 38	116 39	.....	1916-17
1,197 13	13,646 12	168,844 35	154,538 63	2,897 04	157,435 67	6,228 61	17,637 29	.....
226 00	2,793 09	22,448 60	25,345 64	.....	.....	.....	.....	.....
.....
1,423 13	16,439 21	191,292 95	179,884 27	2,897 04	157,435 67	6,228 61	17,637 29	.....

SEVERN SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balances brought forward 31st October, 1919		\$5,110 68
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$1,197 13	
Provision against equipment employed in respect of con- tracts with sundry companies	226 00	
Interest at 4% per annum on monthly balances to the credit of the account	204 43	
		<u>1,627 56</u>
		\$6,738 24
Expenditures during the year ending 31st October, 1920		<u>1,063 30</u>
Balance carried forward 31st October, 1920		\$5,674 94

SEVERN SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919		\$146,154 18
Deduct expenditures to 31st October, 1919.....		<u>4,402 37</u>
Balance brought forward 31st October, 1919		141,751 81
Added during the year ending 31st October, 1920:		
Amounts charged to Municipalities as part of the cost of power delivered to them	\$33,615 83	
Provision against equipment employed in respect of con- tracts with sundry companies	4,267 22	
Interest at 4% per annum on monthly balances to the credit of the account	5,670 07	
Renewals reserve provided on second-hand equipment purchased	139 50	
		<u>43,692 62</u>
		\$185,444 43
Expenditures during the year ending 31st October, 1920		<u>147 41</u>
		\$185,297 02

SEVERN SYSTEM

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality Sinking Fund Requirements payment of which has been deferred by the Commission under Section 23 of the Act— Sinking Fund Payments made by certain Municipalities which have been operating more than five years—and the Total of the Sinking Fund Payments including interest allowed thereon to October 31, 1920

Municipality	Total Sinking Fund Requirements chargeable to the Municipality under the Act		Sinking Fund Requirements the Payment of which has been Deferred		Sinking Fund Requirements Paid (or Charged) as part of the Cost of Power		Interest at 4% per annum allowed on Sinking Fund requirements which have been paid		Total Sinking Fund Payments and accumulated interest to the credit of the Municipality on 31 October, 1920	
	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	\$	c.	\$	c.
Alliston	3 years ending 31st Oct., 1920	3,063 75	3 yrs. ending 31st Oct., 1920	3,063 75	2 yrs. end. 31 Oct., '20	2,685 44	.....	.....	.....	.....
Barrie	4	7,060 77	2	4,375 33	.....	.....	.....	.....	.....	.....
Beeton	3	2,736 38	3	2,736 38	.....	.....	.....	.....	.....	.....
Bradford	3	1,905 38	3	1,905 38	.....	.....	.....	.....	.....	.....
Coldwater	4	965 55	2	548 78	2 yrs. end. 31 Oct., '20	416 77	.....	.....	.....	.....
Collingwood	4	20,242 40	2	11,388 07	2	8,854 33	.....	.....	.....	.....
Cookstown	3	1,144 79	3	1,144 79	.....	.....	.....	.....	.....	.....
Creemore	4	1,570 25	3	1,176 13	1 yr. end. 31 Oct., '20	394 12	.....	.....	.....	.....
Elmvale	4	1,527 91	2	948 66	2	579 25	.....	.....	.....	.....
Midland	4	12,431 22	2	7,729 75	2	4,701 47	.....	.....	.....	.....
Penetang	4	7,372 57	.....	.....	4	7,372 57	.....	.....	.....	.....
Port McNicoll	4	497 04	3	396 43	1	100 61	.....	.....	.....	.....
Stayner	4	1,591 35	2	1,046 02	2	545 33	.....	.....	.....	.....
Thornton	2	367 58	2	367 58	.....	.....	.....	.....	.....	.....
Tottenham	3	1,251 08	3	1,251 08	1 yr. end. 31 Oct., '20	152 22	.....	.....	.....	.....
Victoria Harbour	4	747 32	3	595 10	1	81 41	.....	.....	.....	.....
Waubashene	4	384 87	3	303 46	.....	.....	.....	.....	.....	.....
Totals—Municipalities	.....	64,860 21	.....	38,976 69	.....	25,883 52	.....	.....	.....	.....
Totals—Companies (from commencement of operations)	.....	11,959 94	(Nil.)	.....	.....	11,959 94	.....	.....	.....	.....
Grand Totals	.....	76,820 15	.....	38,976 69	.....	37,843 46	.....	.....	.....	.....

SEVERN SYSTEM

Statement showing the net Credit or Charge to each Municipality in respect of power supplied to it to 31st October, 1919—the cash received and applied thereon, interest added during the year, also the amount Credited or Charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a Credit or Charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Cash receipts and pay- ments on account of such charges made during the year		Interest at 4% per annum added during the year		Amount Credited or Charg- ed in respect of power supplied in the year end- ing 31st October, 1920		Accumulated amount standing at the credit or Charge on 31st Oct., 1920	
		Credit	Charge			Credited	Charged	Credited	Charged	Credit	Charge
Alliston	June, 1918.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Barrie	Apr., 1913.	11,391 55	4,278 27	44 92	455 66	170 41	2,064 70	11,823 78	2,468 46		
Beeton	Aug., 1918.		3,967 16			158 69	23 43		4,324 94		
Bradford	Oct., 1918.		3,736 10			149 44	199 09		6,225 98		
Coldwater	Mar., 1913.		2,887 24			115 49	2,340 44		2,647 13		
Collingwood	Mar., 1913.	16,028 72									
Cookstown	May, 1918.		1,667 11		641 15		11,067 58	5,602 29	1,599 76		
Creemore	Nov., 1914.	2,398 60			95 94		425 56	2,068 98			
Elmvale	June, 1913.	132 05			5 28			672 37			
Midland	July, 1911.		14,099 56	162 28		562 55			13,350 66		
Penetang	July, 1911.	510 85			20 43			3,174 99			
Port McNicoll	Jan., 1915.		2,237 02			89 48			1,438 71		
Stayner	Oct., 1913.	9 19			37			160 73			
Thornton	Nov., 1918.		885 70			35 43	308 24		1,229 37		
Tottenham	Oct., 1918.		2,110 41			84 42	1,208 25		3,403 08		
Victoria Harbor	July 1914.	195 25			7 81			458 77			
Waubashene	Dec., 1914.		136 56			5 46			25 63		
Totals		30,666 21	36,005 13	207 20	1,226 64	1,438 05	17,637 29	23,961 91	40,713 72		

WASDELL'S SYSTEM

Operating Account for Year Ending 31st October, 1920

<i>Costs of operation as provided for under Sections 6 C and 23 of the Act.</i>		<i>Revenue for Period.</i>	
Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative Expenses chargeable to the operation of this System	\$14,732 52	Collected from Municipalities	\$20,563 06
Interest on Capital Investment	13,526 10	Power sold to Private Companies and to Severn System	17,513 95
Provision for renewal of Generating Plant, Lines, Stations, etc.	5,938 36	Add amounts due by certain Municipalities, being the difference between the sums paid and the Costs of Power supplied to them in the period	\$1,303 65
Provision for Contingencies	253 24	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	216 62
<i>Provision for Sinking Fund:</i>			1,087 03
By charges against Municipalities	\$2,656 27	Revenue	\$39,164 04
By charges against contracts with Private Companies which purchased power	2,640 25	Loss on Sale of Power to Private Companies (written off against Contingency Reserve)	582 70
	5,296 52		<u>\$39,746 74</u>

WASDELL

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section mission from each Municipality on Account of such Cost, and the Amount Credited Actual Cost of Power Supplied to it

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average H.P. supplied in year after correction for power factor	Share of Operating	
	To Jan. 1, 1920	To Oct. 31, 1920			Operating, Maintenance and Administrative Expenses	Interest
	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.
Beaverton	45 00	55 00	35,404 80	104.2	2,237 23	1,612 68
Brechin.....	55 00	85 00	23,263 31	34.5	899 60	1,059 65
Cannington.....	50 00	65 00	33,235 43	81.1	1,584 96	1,513 86
Kirkfield .....	.....	45 00	4,824 07	4.3	106 09	121 47
Sunderland	55 00	85 00	28,850 85	47.5	974 57	1,314 15
Woodville	55 00	80 00	26,833 02	47.9	941 63	1,222 23
Totals—Municipalities			152,411 48	319.5	6,744 08	6,844 04
Totals—Companies			169,253 95	.....	7,988 44	6,682 06
Grand Totals			321,665 43	319.5	14,732 52	13,526 10

SYSTEM

23 of the Act, of Power Supplied to it by the Commission, the Amount Received by the Com-
or Charged to each Municipality upon ascertaining by annual adjustment the
in the Year Ending 31st October, 1920

Costs and Fixed Charges			Shortage From Sale of Power to Severn System	Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts Paid to the Com- mission by each Muni- cipality	Amount Credited or charged to each Municipality upon ascertaining the Cost of Power by Annual Adjustment		Sinking Fund for the Years mentioned hereunder charged as part of the Cost of Power in the Year 1919-1920
Renewals	Contin- gencies	Sinking Fund				Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
708 02	34 45	637 21	718 30	5,947 89	5,307 59	.....	640 30	1920
465 22	11 41	418 70	376 68	3,231 26	2,689 12	.....	542 14	1920
664 63	26 81	598 17	506 61	4,895 04	4,966 69	71 65	.....	1920
53 32	1 42	.....	31 28	313 58	192 37	.....	121 21	1920
576 95	15 69	519 25	332 74	3,733 35	3,767 81	34 46	.....	1920
536 60	15 83	482 94	329 74	3,528 97	3,639 48	110 51	.....	1920
3,004 74	105 61	2,656 27	2,295 35	21,650 09	20,563 06	216 62	1,303 65	.....
2,933 62	147 63	2,640 25	2,295 35	18,096 65	17,513 95	.....	*582 70	.....
5,938 36	253 24	5,296 52	.....	39,746 74	38,077 01	.....	1,669 73	.....

* Charged to Contingency Reserve.

WASDELL'S SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward, 31st October, 1919		\$14,277 43
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of		
Power delivered to them	\$105 61	
Provision against equipment employed in respect of con-		
tracts with Severn System and Companies	147 63	
Interest at 4% per annum on monthly balance to the		
credit of the account	571 10	
		<u>824 34</u>
		\$15,101 77
Expenditures (including the restringing of aluminum cable		
during the year ending 31st October, 1920	\$14,519 07	
Losses for the year on power sold to Private Companies	582 70	
		<u>\$15,101 77</u>
Balance		Nil

WASDELL'S SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919		\$27,416 02
Deduct:		
Expenditures to 31st October, 1919		858 47
		<u>\$26,557 55</u>
Balance brought forward, 31st October, 1919		
Added during the year ending 31st October, 1920:		
Amounts charged to Municipalities as part of the Cost of		
Power delivered to them	\$3,004 74	
Provision against equipment employed in respect of Severn		
System and Companies	2,933 62	
Interest at 4% per annum on the monthly balances to		
the credit of the account	1,062 36	
		<u>7,000 67</u>
		\$33,558 22
Expenditures during the year ending 31st October, 1920	2,284 71	
Balance carried forward, 31st October, 1920		<u>\$31,273 51</u>

WASDELL'S SYSTEM

Statement showing the Total Sinking Fund Requirements to be met by each Municipality—
Sinking Fund Requirements the payment of which has been deferred by the Commission under Section 23 of the Act—Sinking Fund Payments made
by certain Municipalities who have been operating more than five years—and the total of the Sinking Fund Payments
to 31st October, 1920

Municipality	Total Sinking Fund Requirements Charged to the Municipality under the Act		Sinking Fund Requirements the payment of which has been deferred		Sinking Fund paid (or charged) as part of the cost of power		Total Sinking Fund Payments to the Credit of the Municipality on 31st Oct., 1920
	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	
Beaverton ..	1 year ending 31st Oct., 1920,	\$ c. 637 21	.....	\$ c.	1 year ending 31st Oct., 1920	\$ c. 637 21	\$ c. 637 21
Brechin.....	1 " " "	418 70	.....	.....	1 " " "	418 70	418 70
Cannington..	1 " " "	598 17	.....	.....	1 " " "	598 17	598 17
Kirkfield....	1 " " "	48 00	1 year ending 31st Oct., 1920	48 00	.....	.....	.....
Sunderland .	1 " " "	519 25	.....	.....	1 year ending 31st Oct., 1920	519 25	519 25
Woodville ..	1 " " "	482 94	.....	.....	1 " " "	482 94	482 94
Totals—Municipalities		2,704 27	.....	48 00	.....	2,656 27	2,656 27
Totals—Companies (from commencement of operations).....		2,640 25	(nil.).....	.....	(From commencement of operations).....	2,640 25	2,640 25
Grand Totals		5,344 52	.....	48 00	.....	5,296 52	5,296 52

WASDELL'S SYSTEM

Statement showing the net charge to each Municipality in respect of Power supplied to it to 31st October, 1919—and interest added during the year, also the amount credited or charged to each Municipality in respect of Power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Charge at 31st October, 1919	Interest at 4 % per annum added during the year		Amount credited or charged in respect of power supplied in year ending 31st October, 1920		Accumulated amount standing at the Credit or Charge on 31st October, 1920	
			Charged		Credited	Charged	Credit	Charge
Beaverton	Nov., 1914.....	\$ c. 4,226 80	\$ c. 169 06		\$ c.	\$ c. 640 30	\$ c.	\$ c. 5,036 16
Brechin.....	Jan., 1915.....	2,961 78	118 47		.....	542 14	.....	3,622 39
Cannington	Nov., 1914.....	3,977 79	159 11		71 65	.....	.....	4,065 25
Kirkfield.....	June, 1920.....	.....	.....		.....	121 21	.....	121 21
Sunderland	Nov., 1914.....	3,862 42	154 51		34 46	.....	.....	3,982 47
Woodville.....	Nov., 1914.....	3,621 70	144 87		110 51	.....	.....	3,656 06
		18,650 49	746 02		216 62	1,303 65	.....	20,483 54

EUGENIA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Secs. 6c. and 23 of the Act:		Revenue for Period:	
Cost of operating and maintaining the Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system		Collected from Municipalities	\$119,357 98
Interest on Capital Investment...		Power sold to Private Companies and to Severn System	6,585 33
Provision for renewal of Generating Plant, Lines, Stations, etc.	\$62,179 71	Add amounts due by certain Municipalities being the deficiency between sums paid and the costs of power supplied to them in the period	40,840 36
Provision for Contingencies:	76,884 61	Revenue	\$166,783 67
By charges against Municipalities ..		Loss on sale of power to Private Companies (written off against Contingency Reserve) .	3,091 85
By charges against contracts with Private Companies, also the Severn System which purchased power	\$797 75		
	41 00		
	838 75		
	\$169,875 52		\$169,875 52

EUGENIA SYSTEM.

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section 23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Commission from each Municipality on account of such Cost—and the Amount Credited or Charged to each Municipality upon ascertaining by annual adjustment the Cost of Power Supplied to it in the year ending October 31, 1920.

EUGENIA

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section
mission from each Municipality on Account of such Cost—and the Amount
adjustment the Cost of Power applied to

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Share of Operating	
	To Jan. 1, 1920	To Oct. 31, 1920			Operating, Maintenance and Administrative Expenses	Interest
	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.
Arthur	45 00	65 00	98,390 56	129.	3,753 92	4,499 10
Chatsworth	30 00	45 00	13,877 79	29.	644 92	636 05
Chesley	40 00	45 00	123,737 23	250.3	3,976 84	5,666 17
Dundalk	27 00	38 00	34,920 17	87.7	1,779 65	1,592 98
Durham	33 00	45 00	39,183 66	100.6	2,042 92	1,798 41
Elmwood	35 00	45 00	24,599 35	51.	1,058 30	1,127 40
Flesherton	26 00	36 00	22,764 99	57.3	974 55	1,044 62
Grand Valley	45 00	60 00	38,986 67	60.7	1,758 96	1,784 07
Hanover	35 00	35 00	246,672 75	593.1	9,937 09	10,655 02
Holstein	44 00	75 00	13,190 42	9.3	443 38	601 95
Hornings Mills			4,968 03	5.	1,172 27	226 80
Markdale	23 00	35 00	29,898 30	85.7	1,198 45	1,373 35
Mount Forest	40 00	55 00	94,000 21	151.6	3,364 65	4,263 76
Neustadt	42 50	45 00	48,234 10	84.2	1,747 16	2,114 63
Orangeville	35 00	55 00	89,295 98	136.2	2,958 53	4,079 91
Owen Sound	28 00	28 00	444,959 77	1,132.2	16,176 79	20,421 01
Shelburne	30 00	38 00	81,237 57	183.6	3,336 32	3,718 61
Tara	37 00	85 00	45,563 21	44.6	1,382 62	2,081 69
Totals—Municipalities			1,494,480 76	3,191.1	57,709 32	67,685 53
Totals—Companies and Severn System (which purchased power)....			201,469 53	164.	4,470 39	9,199 08
Non-operating Capital			217,815 21	.....	.....	.....
Grand Totals			1,913,765 50	3,355.1	62,179 71	76,884 61

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Com-
Credited or Charged to each Municipality upon ascertaining by annual
it in the Year Ending 31st October, 1920

Costs and Fixed Charges		Loss on Sale of Power to Severn System charged to Municipalities in proportion to their Maintenance Costs	Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts Paid to Commission by each Municipality	Amount charged to each Municipality upon ascertaining the Cost of Power by annual adjustment
Renewals	Contin- gencies				
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,082 86	32 25	774 36	11,142 49	7,828 36	3,314 13
241 64	7 25	94 36	1,624 22	1,192 75	431 47
2,192 07	62 57	618 67	12,518 32	10,931 72	1,586 60
531 22	21 92	254 84	4,180 61	3,092 46	1,068 15
591 92	25 15	247 42	4,705 82	4,234 08	471 74
430 28	12 75	146 85	2,775 58	2,142 32	633 26
359 74	14 32	126 59	2,519 82	1,862 98	656 84
779 10	15 17	291 53	4,628 83	3,370 25	1,258 58
3,521 28	148 27	1,435 56	25,697 22	20,757 49	4,939 73
317 74	2 33	89 98	1,455 38	650 91	804 47
112 38	1 25	81 42	1,594 12	685 26	908 86
423 93	21 42	141 64	3,158 79	2,749 04	409 75
1,829 87	37 90	637 62	10,133 20	7,961 60	2,171 60
863 30	21 05	261 55	5,007 69	3,552 07	1,455 62
1,794 47	34 05	587 22	9,454 18	6,770 41	2,683 77
6,770 82	283 05	2,192 00	45,843 67	31,702 35	14,141 32
1,343 73	45 90	530 41	8,974 97	6,558 90	2,416 07
1,037 76	11 15	270 21	4,783 43	3,315 03	1,468 40
25,224 11	797 75	8,781 63	160,198 34	119,357 98	40,846 36
4,748 34	41 00	8,781 63	9,677 18	6,585 33	*3,091 85
.....
29,972 45	838 75	.....	169,875 52	125,943 31	.....

* Charged to Contingency Reserve.

EUGENIA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$19,488 48
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$797 75	
Provision against equipment employed in respect of contracts with sundry companies	41 00	
Interest at 4% per annum on monthly balances to the credit of the account	779 54	
		<u>1,618 29</u>
		\$21,106 77
Expenditures during the year ending 31st October, 1920..	\$4,583 98	
Losses for the year on power sold to Private Companies.	3,091 85	
		<u>7,675 83</u>
Balance carried forward 31st October, 1920		\$13,430 94

EUGENIA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919		\$101,609 90
Deduct expenditures to 31st October, 1919		<u>785 58</u>
Balance brought forward 31st October, 1919		\$100,824 32
Added during the year ending 31st October, 1920:		
Amounts charged to Municipalities as part of the cost of power delivered to them	\$25,224 11	
Provision against equipment employed in respect of contracts with sundry companies	4,748 34	
Interest at 4% per annum on the monthly balance to the credit of the account	4,032 97	
Renewal reserve provided on second-hand equipment transferred	1,163 37	
		<u>35,168 79</u>
		\$135,993 11
Expenditures during the year ending 31st October, 1920		<u>230 91</u>
		\$135,762 20

EUGENIA SYSTEM

Statement showing the net credit or charge to each Municipality in respect of power supplied to it 31st October, 1919--the Cash received and applied thereon, Interest added during the year, also the amount charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Cash receipts and pay- ments on account of such charges	Interest 4% per annum added during the year		Amount charged in re- spect of power supplied in year ending 31st Oct., 1920	Accumulated amount standing at the charge on 31st October, 1920
		Credit	Charge		Credited	Charged		
Arthur	Dec., 1916	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Chatsworth	Dec., 1915 .....	.....	6,057 46	.....	.....	242 30	3,314 13	9,613 89
Chesley	July, 1916 .....	.....	1,103 74	.....	.....	44 15	431 47	1,579 36
Dundalk	Dec., 1915 .....	.....	5,973 57	.....	.....	238 94	1,586 60	7,799 11
Durham	Dec., 1915 .....	.....	2,617 90	.....	.....	104 72	1,088 15	3,810 77
Elmwood	Apr., 1918 .....	.....	2,238 26	.....	.....	89 53	471 74	2,799 53
Flesherton	Dec., 1915 .....	.....	417 05	.....	.....	16 68	633 26	1,066 99
Grand Valley	Dec., 1916 .....	.....	1,414 56	.....	.....	56 58	656 84	2,127 98
Hanover	Sept., 1916 .....	.....	1,147 11	.....	.....	45 88	1,258 58	2,451 57
Holstein	May, 1916	2,809 73	.....	.....	112 39	.....	4,939 73	2,017 61
Hornings Mills	July, 1916 .....	.....	2,658 88	.....	.....	106 36	804 47	3,569 71
Markdale	Mar., 1916	42 26	.....	.....	1 69	.....	998 86	864 91
Mount Forest	Dec., 1915 .....	.....	1,444 44	.....	.....	57 78	409 75	1,911 97
Neustadt	Dec., 1918 .....	.....	13,284 85	.....	.....	531 39	2,171 60	15,987 84
Orangeville	July 1916 .....	.....	832 53	.....	.....	33 30	1,455 62	2,321 45
Owen Sound	Dec., 1915 .....	.....	5,384 08	.....	.....	215 36	2,683 77	8,283 21
Shelburne	July, 1916	12,179 68	.....	.....	487 19	.....	14,141 32	1,474 45
Tara	Feb., 1918 .....	.....	1,397 63	74 10	.....	54 82	2,416 07	3,794 42
		.....	3,783 22	.....	.....	151 33	1,468 40	5,402 95
Totals		15,031 67	49,755 28	74 10	601 27	1,989 12	40,840 36	76,877 72

EUGENIA RURAL LINES

Operating Account for Year Ending 31st October, 1920

		REVENUE	
Interest on Capital Investment	\$94 12	Interest and Sinking Fund collected from Municipalities which operate lines	\$124 64
Provision for Sinking Fund	30 52		
Totals	<u>\$124 64</u>	Total.....	<u>\$124 64</u>

Statement showing Interest and Sinking Fund Charges, 31st October, 1920

—	Capital Cost	Interest	Sinking Fund	Total Interest and Fixed Charges	Revenue from Municipalities
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Markdale.....	1,182 53	62 38	21 30	83 68	83 68
Flesherton.....	512 08	31 74	9 22	40 96	40 96
Totals.....	1,694 61	94 12	30 52	124 64	124 64

Statement showing the total Sinking Fund requirements of each Municipality and the total of the Sinking Fund Payments with interest allowed thereon to 31st October, 1920

—	Total Sinking Fund Requirements		Sinking Fund Paid	Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund Payments and accumulated Interest to 31st October, 1920
	Period Covered	Amount			
		\$ c.	\$ c.	\$ c.	\$ c.
Markdale.....	4 years ending 31st Oct., 1920	75 53	75 53	4 00	79 53
Flesherton.....	3 , , , , ,	25 36	25 36	94	26 30
Totals.....	.....	100 89	100 89	4 94	105 83

MUSKOKA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c. and 23 of the Act:		Revenue for Period:	
Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system Interest on Capital Investment Provision for renewal of Generating Plant, Lines, Stations, etc. Provision for Contingencies: By charges against Municipalities By appropriating the net profits on power sold to sundry customers at Muskoka Falls		Collected from Municipalities	\$28,487 69
		Power sold to sundry customers at Muskoka Falls	54 15
	\$9,775 34		
	9,661 89	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	\$1,987 85
	7,432 25	Add amounts due by certain Municipalities, being the difference between sums paid and the costs of power supplied to them in the period	684 26
			1,303 59
	31 27		
			\$27,238 25

MUSKOKA SYSTEM

Statement showing the Amount to be Paid by each Municipality as the Cost—under Section 23 of the Act—of Power supplied to it by the Commission, the Amount received by the Commission from each Municipality on account of such Cost, and the amount credited or charged to each Municipality upon ascertaining by annual adjustment the actual cost of power supplied to it in the year ending 31st October, 1920

Municipality	Interim Rates per Horse Power collected by Commission during year	Share of Capital System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Share of Operating Costs and Fixed Charges				Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts paid to the Commission by each Municipality	Amounts Credited or Charged to each Municipality upon ascertaining the Cost of Power by annual adjustment	
				Operating, Maintenance and Administrative Expenses	Interest	Renewals	Contingencies			Credited	Charged
	\$ c.	\$ c.	%	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Gravenhurst	14 00	47,985 03	478.4	3,397 74	2,185 71	1,679 29	119 60	7,382 34	6,698 08	.....	684 26
Huntsville	25 00	163,848 23	871.6	6,377 60	7,463 24	5,743 02	217 90	19,801 76	21,789 61	1,987 85	.....
Totals Municipalities....	.....	211,833 26	1,350.0	9,775 34	9,648 95	7,422 31	337 50	27,184 10	28,487 69	1,987 85	684 26
Muskoka Falls (Sundry Customers).....	.....	284 01	.....	.....	12 94	9 94	.....	22 88	54 15	31 27	.....
Grand Totals .....	.....	212,117 27	.....	9,775 34	9,661 89	7,432 25	337 50	27,206 98	28,541 84	.....	.....

MUSKOKA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$1,096 18
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$337 50	
Profit on the sales of power to sundry customers at Muskoka Falls	31 27	
Interest at 4% per annum on monthly balances to the credit of the account	43 85	
		<u>412 62</u>
Balance carried forward 31st October, 1920		\$1,508 80

MUSKOKA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to October 31, 1919		\$20,616 59
Deduct expenditures to 31st October, 1919		<u>1,180 12</u>
Balance brought forward 31st October, 1919		\$19,436 47
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$7,422 31	
Provision against equipment in respect of Muskoka Falls	9 94	
Interest at 4% per annum on the monthly balances to the credit of the account	777 46	
		<u>8,209 71</u>
		<u>\$27,646 18</u>

MUSKOKA SYSTEM

Statement showing the net charge to each Municipality in respect of power supplied to it to 31st October, 1919,—Interest added during the year, also the amount credited or charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net charge at 31st October, 1919	Interest at 4 % per annum charged during the year	Amount credited or charged in respect of power supplied in the year ending 31st October, 1920		Accumulated amount standing at the charge on 31st October, 1920
				Credited	Charged	
Gravenhurst	Nov., 1915.....	\$ c. 5,279 73	\$ c. 211 19	\$ c.	\$ c. 684 26	\$ c. 6,175 18
Huntsville	Sep., 1916.....	6,400 17	256 01	1,987 85	.....	4,668 33
Totals .....	.....	11,679 90	467 20	1,987 85	684 26	10,843 51

RIDEAU SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c. and 23 of the Act:		Revenue for Period:	
Power Purchased	\$6,705 05	Collected from Municipalities	\$62,379 78
Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this System	14,535 23	Add amounts due by certain Municipalities, being the difference between sums paid and the cost of power supplied to them in the period	\$5,307 53
Interest on Capital Investment	29,367 77	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	2,164 30
Provision for renewal of Generating Plant, Lines, Stations, etc.	14,505 58		
Provision for contingencies:			
By charges against Municipalities	409 38		
		Revenue	65,523 01
			\$65,523 01

RIDEAU

Statement showing the Amount to be Paid by each Municipality as the Cost under Section
mission from each Municipality on Account of such Cost—and the Amount
adjustment the Cost of Power Supplied to

Municipality	Interim Rates per Horse Power Collected by Commission during Year		Share of Cap- ital Cost of System on which Inter- est and Fixed Charges are Payable	Average Horse Power Supplied in Year after Cor- rection for Power Factor	Cost of Power to Commission
	To May 31, 1920	From June 1, 1920			
Carleton Place.....	\$ c. 33 00	\$ c. 44 95	\$ c. 360,212 16	616.8	\$ c. 523 34
Perth	32 00	41 80	274,391 20	382.	2,289 43
Rideau Development (Power)	14 00+ 543 10 per month	.....	.....	52.	615 35
Smith's Falls	28 00	38 32	397,828 18	586.7	3,276 93
Totals.....	.....	.....	1,032,387 92	1,637.5	6,705 05

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Com-
Credited or Charged to each Municipality upon ascertaining by annual
it in the Year Ending 31st October, 1920

Share of Operating Costs and Fixed Charges				Total Cost of Power for Year as Pro- vided to be Paid under Section 23 of Act	Amounts Paid to Commission by each Municipality	Amount Credited or Charged to each Municipality upon ascertaining the Cost of Power by annual adjustment	
Operating, Maintenance and Adminis- trative Ex- penses	Interest	Renewals	Contin- gencies			Credited	Charged
\$ c. 7,034 53	\$ c. 9,318 63	\$ c. 4,603 05	\$ c. 154 20	\$ c. 21,633 75	\$ c. 23,798 05	\$ c. 2,164 30	\$ c.
3,121 37	8,306 68	4,102 73	95 50	17,915 71	14,409 44	.....	3,506 27
329 99	2,012 56	994 13	13 00	3,965 03	3,965 03	.....	.....
4,049 34	9,729 90	4,805 67	146 68	22,008 52	20,207 26	.....	1,801 26
14,535 23	29,367 77	14,505 58	409 38	65,523 01	62,379 78	2,164 30	5,307 53

RIDEAU SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$207 70
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$409 38	
Interest at 4% per annum on monthly balance to the credit of the account	8 31	
		<u>417 69</u>
Balance carried forward 31st October, 1920		\$625 39

RIDEAU SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919		\$5,153 92
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$14,505 58	
Interest at 4% per annum on the monthly balances to the credit of the account	206 16	
Renewals Reserve provided on second-hand equipment transferred	1,956 55	
		<u>16,668 29</u>
Balance carried forward 31st October, 1920		\$21,822 21

RIDEAU SYSTEM

Statement showing the Net Credit or Charge to each Municipality in respect of Power Supplied to it to 31st October, 1919—Interest Added during the Year; also the Amount Credited or Charged to each Municipality in respect of Power Supplied in the Year Ending 31st October, 1920, and the Accumulated Amount standing as a Credit or Charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Interest at 4 % per annum added during the year		Amount Credited or Charged in respect of Power Supplied in the year ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
		Credit	Charge	Credited	Charged	Credited	Charged	Credit	Charge
Carleton Place	May, 1919.....	\$ c. 2,932 53	\$ c.	\$ c. 117 30	\$ c.	\$ c. 2,164 30	\$ c.	\$ c. 5,214 13	\$ c.
Perth.....	Feb., 1919.....	.....	1,719 27	.....	68 77	.....	3,506 27	.....	5,294 31
Smith's Falls	Sep., 1918.....	1,058 87	.....	42 35	.....	.....	1,801 26	.....	700 04
Totals .....	.....	3,991 40	1,719 27	159 65	68 77	2,164 30	5,307 53	5,214 13	5,994 35

ST. LAWRENCE SYSTEM

Operating Account Year Ending 31st October, 1920

Costs of operations as provided for under Sections 6c and 23 of the Act:

Power Purchased
Costs of operating and maintaining the Gen-
erating Plant, Transmission Lines, Stations,
etc., including the proportion of Adminis-
trative expenses chargeable to the operation
of this System
Interest on Capital Investment
Provision for renewal of Lines, Stations, etc. ..
Provision for contingencies
Provision for Sinking Fund

\$33,710.84

16,935.23
24,527.99
21,537.01
3,185.52
4,639.67

\$104,536.26

Revenue for Period:

Collected from Municipalities
Power sold to Private Companies
Add amounts due by certain Municipalities,
being the difference between sums paid and
the costs of power supplied to them in the
period

Loss on sale of power supplied to Private Com-
panies (written off against Contingency
Reserve)

\$72,443.32
22,870.72

6,055.00

\$101,369.04

3,167.22

\$104,536.26

ST. LAWRENCE SYSTEM.

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section 23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Commission from each Municipality on Account of such Cost—and the Amount Charged to each Municipality upon ascertaining by annual adjustment the actual cost of Power Supplied to it in the year ending October 31, 1920.

ST. LAWRENCE

Statement Showing the Amount to be Paid by Each Municipality as the Cost—Under Section
Commission from Each Municipality on Account of Such Cost, and the amount Charged
Power Supplied to it in the Year

Municipality	Interim Rates per Horse Power Col- lected by Commis- sion during year	Share of Capital Cost of System on which In- terest and Fixed Charges are Payable	Average Horse Power Supplied in Year after Cor- rection for Power Factor	Cost of Power to Commis- sion	Share of Operating	
					Operating Mainten- ance and Adminis- trative Expenses	Interest
Brockville.....	45.19	\$ c. 278,187 28	1,004.8	\$ c. 15,967 69	\$ c. 7,597 29	\$ c. 12,578 99
Chesterville.....	76.73	68,756 78	148.	2,352 28	1,928 13	3,118 78
Prescott.....	44.93	52,249 25	201.8	3,207 32	1,833 87	2,353 66
Williamsburg	50.00	4,527 60	18.6	260 42	370 16	206 23
Winchester	69.84	31,320 13	83.9	1,333 47	1,785 04	1,419 19
Totals—Municipalities		435,041 04	1,457.1	23,121 18	13,514 49	19,676 85
Totals—Companies....		107,798 24	666.6	10,589 66	3,420 74	4,851 14
Non-Operating Capital.....		98,294 31	.....	.....	.....	.....
Grand Totals		641,133 59	2,123.7	33,710 84	16,935 23	24,527 99

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—The Amount Received by the to Each Municipality upon ascertaining by annual adjustment the actual cost of Ending 31st October, 1920.

Costs and Fixed Charges			Total Cost of Power for Year as Provided to be Paid Under Sec. 23 of Act	Amounts Paid to the Commission by each Municipality	Amounts Charged to each Municipality upon ascertaining the Cost of Power by Annual Adjustment	Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Renewals	Contingen-cies	Sinking Fund				
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
11,045 10	1,507 20	.....	*48,696 27	45,405 27	3,291 00	.....
2,738 46	222 00	1,232 00	*11,591 65	11,187 08	404 57	1919-1920
2,066 65	302 70	930 00	10,694 20	9,064 58	1,629 62	1919-1920
181 08	27 90	.....	1,045 79	929 16	116 63	.....
1,246 13	125 82	560 76	6,470 41	5,857 23	613 18	1919-1920
17,277 42	2,185 62	2,722 76	78,498 32	72,443 32	6,055 00	.....
4,259 59	999 90	1,916 91	26,037 94	22 870 72	*3,167 22	.....
.....
21,537 01	3,185 52	4,639 67	104,536 26	95,314 04	.....	.....

*Charged to Contingency Reserve.

ST. LAWRENCE SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919—		\$1,555 24
Added during the year ending 31st October, 1920 —		
Amount charged to Municipalities as part of the cost of power delivered to them	\$2,185 62	
Provision against equipment employed in respect of contracts with company	999 90	
Interest at 4% per annum on the monthly balances to the credit of the account	62 20	
		3,247 72
		\$4,802 96
Deduct:—		
Loss for year on power sold to Private Companies	\$3,167 22	
Expenditures during the year ending 31st October, 1920	543 07	
		3,710 29
Balance carried forward 31st October, 1920		\$1,092 67

ST. LAWRENCE SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals 31st October, 1919—		\$47,406 30
Deduct expenditures to 31st October, 1919—		479 03
Balance brought forward 31st October, 1919		\$46,927 27
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$17,277 42	
Provision against equipment employed in respect of contracts with Private Companies	4,259 59	
Interest at 4% per annum on the monthly balances to the credit of the account	1,877 09	
		23,414 10
		\$70,341 37
Expenditures during the year ending 31st October, 1920		1,430 70
		\$68,910 67

ST. LAWRENCE SYSTEM.

Statement showing the Total Sinking Fund Requirements to be met by each Municipality—Sinking Fund Requirements, the Payment of which has been Deferred by the Commission under Section 23 of the Act—Sinking Fund Payments made by Certain Municipalities who have been operating more than Five Years—and the Total of such Sinking Fund Payments to October 31, 1920.

ST. LAWRENCE

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.
Section 23 of the Act—Sinking Fund Payments made by Certain Municipalities
Fund Payments to

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act	
	(a) For period of	(b) Amounts
		\$ c.
Brockville	1 year ending Oct. 31, 1920	4,970 18
Chesterville.....	1 “ “ “ “	1,232 00
Prescott.....	1 “ “ “ “	930 00
Williamsburg	1 “ “ “ “	81 49
Winchester	1 “ “ “ “	560 76
Totals—Municipalities		7,774 43
Totals—Companies (from commencement of operations).....		1,916 91
Grand Totals		9,691 34

SYSTEM

Sinking Fund Requirements, the Payment of which has been Deferred by the Commission under who have been Operating more than Five Years—and the Total of such Sinking 31st, October, 1920

Sinking Fund Requirements, the payment of which has been deferred		Sinking Fund Requirements paid (or charged) as part of the Cost of Power	
(a) For period of	(b) Amounts	(a) For period of	(b) Amounts
	\$ c.		\$ c.
1 year ending Oct. 31, 1920	4.970 18	.....	.....
.....	.....	1 year ending Oct. 31, 1920	1,232 00
.....	.....	1 " " " "	930 00
1 year ending Oct. 31, 1920	81 49	.....	.....
.....	.....	1 year ending Oct. 31, 1920	560 76
.....	5,051 67	.....	2,722 76
(Nil)	.....	(From commencement of operations)	1,916 91
.....	5,051 67	.....	4,639 67

ST. LAWRENCE SYSTEM

Statement showing the net charge to each Municipality in respect of power supplied to it to 31st October, 1919—interest added during the year,
Also the amount charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the
accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date commenced Operating	Net charge at 31st October, 1919	Interest at 4 % per annum charged during the year	Amount charged in respect of power sup- plied in year ending 31st October, 1920	Accumulated amount standing at the charge on 31st Octo- ber, 1920
Brockville	April, 1915.....	\$ c. 10,606 71	\$ c. 424 28	\$ c. 3,291 00	\$ c. 14,321 99
Chesterville	March, 1914.....	8,166 41	326 65	404 57	8,897 63
Prescott	Dec., 1913.....	2,438 17	97 53	1,629 62	4,165 32
Williamsburg	April, 1915.....	1,376 26	55 05	116 63	1,547 94
Winchester.....	Jan., 1914.....	4,542 46	181 69	613 18	5,337 33
Totals.....	.....	27,130 01	1,085 20	6,055 00	34,270 21

THUNDER BAY SYSTEM
Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c and 23 of the Act:		Revenue for Period:	
Power Purchased	\$81,945 00	Collected from City of Port Arthur	\$114,199 64
Costs of operating and maintaining the Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this System.		Less amount collected from Port Arthur in excess of the sum required to be paid by it for power supplied in the period	10,251 59
Interest on Capital Investment	8,963 08	Revenue	\$103,948 05
Provision for renewal of Lines, Stations, etc....	5,395 44		
Provision for Contingencies	4,145 32		
Provision for Sinking Fund	1,367 07		
	2,132 14		
	<u>\$103,948 05</u>		<u>\$103,948 05</u>

THUNDER BAY

Statement showing the amount to be paid by the City of Port Arthur as the cost—under section
sion from that Municipality on account of such cost—and the amount credited to
supplied to it in the year

Municipality	Interim Rate per Horse Power Collected by Commission during year	Capital Cost of System on which Interest and Fixed Chgs. are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commis- sion	Operating
					Operating, Main- tenance and Ad- ministrative Expenses
Port Arthur..	\$ c. 19 75 517.22 per month	\$ c. 118,452 67	5,468.3	\$ c. 81,945 00	\$ c. 8,963 08

Non-operating Capital—
Nipigon Power Development
and Transmission Line 4,001,968 02
4,120,420 69

SYSTEM

23 of the Act—of power supplied to it by the Commission, the amount received by the Commission Port Arthur upon ascertaining by annual adjustment the actual cost of power ending 31st October, 1920

costs and fixed charges				Total Cost of Power for year as provided to be paid under Section 23 of Act	Amount paid to the Commis- sion by the Municipality	Amount credited to Port Arthur upon ascertain- ing the cost of power by annual adjustment
Interest	Renewals	Contingen- cies	Sinking Fund			
\$ c. 5,395 44	\$ c. 4,145 32	\$ c. 1,367 07	\$ c. 2,132 14	\$ c. 103,948 05	\$ c. 114,199 64	\$ c. 10,251 59

THUNDER BAY SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$2,776 36
Added during the year ending 31st October, 1920:		
Amount charged to Port Arthur as part of the cost of power delivered to them	\$1,367 07	
Interest at 4% per annum on the monthly balances to the credit of the account	111 05	
		<u>1,478 12</u>
Balance carried forward 31st October, 1920		\$4,254 48

THUNDER BAY SYSTEM

Reserve for Renewals Account—31st October, 1920

Balance brought forward 31st October, 1919		\$34,210 09
Deduct expenditures to 31st October, 1919		<u>9 75</u>
		\$34,200 34
Added during the year ending 31st October, 1920:		
Amount charged Port Arthur as part of the cost of power delivered to them	\$4,145 32	
Interest at 4% per annum on the monthly balances to the credit of the account	1,368 01	
		<u>5,513 33</u>
Balance carried forward 31st October, 1920		\$39,713 67

THUNDER BAY SYSTEM.

Statement showing the Total Sinking Fund Requirements of the City of Port Arthur, Sinking Fund Payments made by it, and the Total of such Sinking Fund Payments, with interest allowed thereon, to October 31, 1920.

Statement showing the Net Credit to the City of Port Arthur in respect of Power Supplied to it to 31st October, 1919, interest added during the year; also the amount credited to Port Arthur in respect of Power Supplied to it in the year ending 31st October, 1920; and the accumulated amount standing as a credit to that Municipality at 31st October, 1920.

THUNDER BAY

Statement showing the total Sinking Fund requirements of the City of Port Arthur
with interest allowed thereon

Municipality	Sinking Fund Requirements	
	Period Covered	Amount
Port Arthur	10 years ending 31st Oct., 1920	\$ c. 17,437 40

THUNDER BAY

Statement showing the Net Credit to the City of Port Arthur in respect of Power supplied
Arthur in respect of Power supplied to it in the year ending 31st October, 1920,

Municipality	Date commenced operating	Net Credit at 31st October, 1919
Port Arthur	Dec., 1910	\$ c. 17,621 72

SYSTEM

Sinking Fund payments made by it, and the total of such Sinking Fund payments, to October 31, 1920

Sinking Fund Paid		Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund Payments and Accumulated Interest to 31st October, 1920
Period Covered	Amount		
Full Period	\$ c. 17,437 40	\$ c. 3,009 58	\$ c. 20,446 98

SYSTEM

to it 31st October, 1919, interest added during the year; also the amount credited to Port and the accumulated amount standing as a credit to that Municipality at 31st October, 1920

Interest at 4% per annum credited during the year	Amount credited in respect of Power supplied in year ending 31st October, 1920	Accumulated Amount standing as a Credit on 31st October, 1920
\$ c. 704 87	\$ c. 10,251 59	\$ c. 28,578 18

CENTRAL ONTARIO SYSTEM

Operated by The Hydro-Electric Power Commission of Ontario—Statement of Assets and Liabilities—31st October, 1920

Assets.		Liabilities.	
Central Ontario:		Provincial Treasurer:	
Power Development and Hydraulic Rights	\$4,508,528 73	Purchase Price of System	\$8,350,000 00
Transformer Stations	1,084,472 00		
Transmission Lines	1,714,513 37	Debentures issued in connection with purchase of Bruton Township Pulpwood Area..	225,000 00
	\$7,307,514 10	Cash Advances	3,598,185 00
Local Utilities—Electric, Gas, Water and Street Railway	2,199,508 38		\$12,173,185 00
Nipissing:		Accounts payable and accrued charges	\$217,458 25
Power Development and Steam Plant	\$363,297 90	Consumers' Deposits	7,146 85
Transmission Lines	43,322 00	Unearned Water Rates	2,200 00
Transformer Stations	35,492 22		226,805 10
	442,112 12	Reserved for renewals	812,509 75
Local Utilities—Electric	170,678 73	Reserved for contingencies	10,763 90
Rural Lines	30,812 16		
Pulp Mill and Pulpwood Areas	454,227 79	Reserved for Sinking Fund:	
	\$10,604,853 28	For retirement of bonds issued in purchase of Bruton Township Pulpwood Areas	18,803 52
Investments:			
Town of Trenton Debentures, <i>re</i> Sale of Water-works	20,352 04	For repayment of cost of mill at Bancroft	1,177 53
Cash in Bank	4,590 32		
		In respect of Rural Lines	1,235 31
Inventories:			21,216 36
Tools and Equipment	50,631 09		
Materials and Supplies	380,749 49		
	\$431,380 58		
Accounts Receivable:			
Power and Pulpmill Accounts....	\$164,733 94		
Consumers' Supply—Sales Ac- counts	35,581 35		
Consumers' Light and Power Ac- counts ..	30,049 75		
	230,365 04		
Less Reserved for Doubtful Accounts ..	8,209 43		
	222,155 61		

Due by The Hydro-Electric Power Commission of Ontario	\$1,719,472 22
Advances on contracts for pulpwood	11,904 42
Expenses and insurance prepaid	8,116 89
Deferred maintenance, <i>re</i> Insulation of Transmission Lines, chargeable to future operation	54,123 85
Operating deficit	167,530 90
	<hr/>
	\$13,244,480 11

\$13,244,480 11

Surplus Account

Debit balance brought forward October 31, 1919			
Deficit to October 31, 1919 (on both Hydro and Municipal Accounts) in respect of Oshawa Rural Lines, now transferred to Surplus Account	\$191,389 34	Net operating surplus for year ending October 31, 1920	136,716 13
Further provision for Water Rentals accrued for the period March 1, 1916, to October 31, 1919	5,229 90	Balance—as shown on Statement of Assets and Liabilities	167,530 90
	107,627 79		
	<u>\$304,247 03</u>		<u>\$304,247 03</u>

CENTRAL ONTARIO SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919	\$611,650 76
Deduct:	
Expenditures to 31st October, 1919	6,491 83
Balance brought forward 31st October, 1919	605,158 93
Added during the year ending 31st October, 1920:	
By charges against operations	\$196,726 30
Interest at 4% per annum on the monthly balances to the credit of the account	24,295 06
	221,021 36
	\$826,180 29
Deduct:	
Expenditures during the year ending 31st October, 1920	13,670 54
Balance carried forward 31st October, 1920	\$812,509 75

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919	\$5,686 27
Added during the year ending 31st October, 1920:	
By charges against operations	\$6,835 35
Interest at 4% per annum on the monthly balances to the credit of the account	177 28
	7,012 63
	\$12,698 90
Deduct:	
Expenditures to cover contingencies met with during the year ending 31st October, 1920	1,935 00
Balance carried forward 31st October, 1920	\$10,763 90

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Account with the Provincial Treasurer for the Year Ending 31st October, 1920

Oct. 31, 1920:			
Cheque to cover interest to date	\$2,767,263 07		
Nov. 1, 1919 to Oct. 31, 1920:			
Provincial expenditures	226,551 00		
Balance carried down	66,322,950 10		
Nov. 1, 1919:			
Balance Brought Down:			
General Account	\$25,517,816 10		
Chippawa Development Account.	11,075,000 00		
Central Ontario System Account	11,643,185 00		
			\$48,236,001 10
Nov. 1, 1919 to Oct. 31, 1920:			
Sundry Cash Advances:			
General Account	\$6,261,500 00		
Chippawa Development Account..	11,285,000 00		
Central Ontario System Account.	530,000 00		
Provincial Expenditures Account	237,000 00		
			\$18,313,500 00
Oct. 31, 1920:			
Interest on balances from Nov. 1, 1919, to Oct. 31,			
1920		2,767,263 07	
			\$69,316,764 17
Nov. 1, 1920:			
Balance			\$66,322,950 10

SECTION IV

ELECTRICAL ENGINEERING AND CONSTRUCTION

ONTARIO POWER COMPANY

In July the official acceptance tests were carried out on the two 15,000 kv-a. generators installed in 1919. Among other tests, one generator was short-circuited three times at full voltage, full speed, no load. Oscillograms were taken, starting at the instant of closing the control switch on the circuit-breaker and including the time of the short-circuit, the operation of the differential relays and the clearing of the short-circuit by the circuit-breaker. The complete cycle of operations of short-circuit and the clearing of the short-circuit was in this way obtained on the generator and its protective equipment.

A contract was placed with the Canadian Westinghouse Company in June for two complete armature windings for the 8776 kv-a. Westinghouse generators. On account of the severe service imposed on these machines since 1909 the armature insulation has about reached the end of its useful life. It is proposed to partially or completely rewind some of these generators as rapidly as operating conditions will permit.

During September a contract was made with the Standard Underground Cable Company, of Hamilton, Ontario, for the manufacture of 7,650 feet of 3 conductor, 350,000 c.m. 8/32 inch by 8/32 inch paper insulated, lead covered and armored cable for 12,000-volt service. This cable is intended to replace cables on three of the older generators which have been found unsuitable for the service. The new cables will be delivered in a few weeks, and will be installed at the first opportunity.

General engineering, arising out of the changing operating conditions throughout the year, has been carried on. Methods of improving the relay protection on the older sections of the plant were investigated.

QUEENSTON-CHIPPEWA DEVELOPMENT

Queenston Generating Station

During the year, the designing work on the Queenston Generating Station has been actively carried on, and further studies made of the many problems developing in the design, covering short circuit conditions, stability of operation, voltage regulation, relay protection, switchboard equipment, ventilation, fire protection and others.

Numerous conferences have been held with engineers of manufacturing companies to discuss the problems arising out of the design of a power plant of the magnitudes of this development. Visits have been made by the Commission's engineers to the factories of the following companies:

Canadian Westinghouse Company, Limited, Hamilton, Ontario; Canadian General Electric Company, Limited, Peterboro, Ontario; Canadian Porcelain Company, Hamilton, Ontario; Westinghouse Electric and Manufacturing Company,

Pittsburgh, Pennsylvania; General Electric Company, Schenectady, New York; Ohio Insulator Company, Barberton, Ohio.

Visits have also been made to large generating stations now operating, and discussions carried on with the engineers in charge of such stations.

The following paragraphs outline briefly the general layout scheme of the generating station, and cover the equipment ordered during the year.

The ultimate building will be 650 feet long, with the generator room 60 feet wide and 60 feet high. The transformer and switching sections will be 130 feet high and 60 feet wide. The generators will be spaced on 50-foot centres, and the same space will be devoted to the necessary switching equipment and power transformers comprising one complete unit every 50 feet. At each end of the station a section 75 feet long is devoted to service generators and equipment, machine and repair shops, stores, etc. The south half of the station only will be constructed at present.

The control room will be situated in the middle of the station above the generator room and overlooking the river. The present installation includes five generators with complete switching equipment. Their general characteristics were given in the last Annual Report.

Two generating units were ordered from the Canadian General Electric Company, Toronto, on February 26, 1920. These generators have the same rating as those ordered last year from the Canadian Westinghouse Company, Hamilton, i.e., 45,000 kv-a., 80 per cent., power factor, 12,000 volt, three phase, 25 cycle, 187.5 r.p.m., complete with thrust bearing, two guide bearings, direct connected exciter, voltage regulator and accessories. The contract dates for completion of these two units ready for operation are November 1, 1921, and March 1, 1922.

A third generating unit of the same rating was ordered from the Canadian Westinghouse Company, Hamilton, on February 26, 1920, and the contract completion date, ready for operation, is November 1, 1921.

Fifteen 15,000 kv-a. 12,000/63,500 volt single phase, water cooled transformers were ordered from the Canadian Westinghouse Company, Hamilton, on February 26, 1920. The contract dates for complete installation of these transformers are as follows:

First Bank, June 1st, 1921.

Second Bank—July 1st, 1921.

Third Bank—August 1st, 1921.

Fourth Bank—September 1st, 1921.

Fifth Bank—December 1st, 1921.

On October 14, 1920, an order was placed with the Canadian Westinghouse Company, Hamilton, for two 2,200 kv-a., 500 r.p.m., 25 cycle, 2,300 volt generators, complete with direct connected exciters, field rheostats, water-cooled thrust bearings and all appurtenances. The first unit is to be installed ready for service by August 14, 1921, and the second unit by September 14, 1921.

These generators are to furnish power required to operate the plant auxiliaries, such as lighting, auxiliary heating, cranes, elevators, pumps, fans, reserve motor-driven exciters, etc.

Extensive studies have been made regarding the best system of station connections, so as to decrease the hazard of operating such large units, and at the same time to obtain the best operating conditions. Oil switches and bus supports

had to be developed to meet the extreme conditions, as it was found that there was no suitable apparatus on the market to meet the conditions.

An order was placed with the Canadian General Electric Company, Toronto, on August 19, 1920, for sixteen 3,000 ampere, 15,000 volt, three pole, electrically operated oil circuit-breakers. On August 20, 1920, an order was placed with the Canadian Westinghouse Company, Hamilton, for nine 3,000 ampere, 15,000 volt oil circuit-breakers, and, in addition, twenty 500 ampere, 165,000 volt three pole electrically operated breakers. All these breakers are of special design and have guaranteed rupturing capacity sufficient for opening short circuits when operating with eight generating units in parallel.

The contract delivery dates for the above oil circuit-breakers are as follows:

(a) Canadian General Electric Company:

15,000-volt oil circuit-breakers.

Three complete breakers by August 1st, 1921.

“ “ “ “ September 1st, 1921.

“ “ “ “ October 1st, 1921.

“ “ “ “ November 1st, 1921.

“ “ “ “ December 1st, 1921.

One “ “ “ January 1st, 1922.

(b) Canadian Westinghouse Company:

I. 15,000-volt oil circuit breakers.

Three complete breakers by April 1st, 1921.

Two “ “ “ May 1st, 1921.

“ “ “ “ June 1st, 1921.

“ “ “ “ July 1st, 1921.

II. 155,000-volt oil circuit-breakers.

Three complete breakers by April 1st, 1921.

“ “ “ “ May 1st, 1921.

Two “ “ “ June 1st, 1921.

And two on the first of every subsequent month until twenty are delivered.

On September 16, 1920, the Canadian Bridge Company, Walkerville, were given the contract for supplying the superstructure steel, including all columns, girders, crane girders, rails and fastenings, trusses, beams, lintels, curb angles, bracing, grillages, stairwell and elevator shaft framing, ceiling hangers and ribs, brackets for architectural features, anchor bolts, field rivets and bolts, erection bolts, and all stairs, hand rails, ladders, etc. The contract date for completing the steel for the first five bays of the generator room is December 8, 1920, and the balance of the contract within six months.

Two 150-ton electrically operated cranes with equalizer lifting beam were ordered from the Dominion Bridge Company, Montreal, on March 31, 1920, complete delivery to be made by January 1, 1921. These two cranes are so designed that they will work independently or together. The equalizer lifting beam is to be used when lifting the 300-ton rotor of the main generators.

Specifications were issued on October 15, 1920, covering high voltage lightning arresters, and on October 21, 1920, covering current limiting reactors. Specifications are now under preparation covering the insulators and disconnecting switches for the high and low voltage wiring.

Montrose Distributing Station

The work of installing the three 500 k.w, 600-volt rotary converters and switching equipment which was started in August, 1919, was completed in February, 1920. This provides power for a section of the electric railways being used for the construction of the Queenston-Chippawa Development.

The pipe line for cooling water for this station, mentioned in the last Annual Report, was completed in January.

In August of this year it was found necessary to install an air compressor plant adjacent to Montrose Station, for the purpose of supplying compressed air for construction work on the Queenston-Chippawa Development. In order to supply power for the compressors it was decided to install one 1,500 kv-a. 3-phase 13,200/4,000-volt transformer and nine 200 kv-a. 4,000/575-volt transformers in Montrose Station. When the original station was built provision was made for this additional installation; therefore it was not necessary to add any additional building. An order was placed in August with the Moloney Electric Company of Canada for the nine 200 kv-a. transformers, and the 1,500 kv-a. 3-phase transformer was obtained from our stock. Construction work on this installation was started by the Commission's Construction Department in September, and it is expected that the work will be completed in November. When this addition is completed this station will contain three 1,500 kv-a. 3-phase 12,000/4,000-volt transformers; three banks, each consisting of three 200 kv-a. 4,000/575-volt transformers; and three banks, each consisting of three 165 kv-a. 12,000/430-volt transformers which are used with the three 500 k.w. 600-volt direct current rotary converters. There are three 600-volt direct current feeders, and four 4,000-volt alternating current outgoing feeders with the necessary switching equipment. The 575-volt power is used entirely in the compressor plant.

NIAGARA SYSTEM

NIAGARA TRANSFORMER STATION

Additional Transformer Equipment

The installation of the three 75 kv-a. 12,000/575-volt transformers for station service, mentioned in the last Report, was completed and put into service in June, 1920.

The bank of three 3,500 kv-a. transformers, which were installed as No. 4 bank 46,000 volts, has been reconnected and necessary changes in the bus and switching equipment made, so as to operate as 110,000-volt transformers. This work was completed and put into service as No. 9 bank 110,000-volt transformers in January of this year.

Switching and Bus Equipment, 12,000 Volts

In order to provide additional strength to the 12,000-volt buses for the feeders from the Ontario Power Company and for the 110,000-volt transformers, all the bus supports which were installed in the original installations on these buses are being removed and replaced with heavy type bus supports. This work has been carried on during the past year, and it is expected that this work will be completed during the latter part of the year. Also all connections to these buses are being taped so as to provide additional protection. Wherever possible, all the

12,000-volt buses are being enclosed by installing barriers over openings in the structures.

A Westinghouse type "C" 12,000-volt oil circuit-breaker was installed between No. 11 and 12 Ontario Power feeders on the Ontario Power bus to supply power to No. 9 bank of 110,000-volt transformers. Also a similar type circuit breaker was installed between No. 8 and 9 Ontario Power feeders on this bus to supply power to the new banks of station service transformers. All the 12,000-volt oil circuit-breakers which were installed in the original station have now been removed, and replaced by oil circuit-breakers of improved design and greater rupturing capacity.

A set of three Metropolitan Company reactors have been installed between the north end of the Canadian Niagara Power main 12,000-volt bus and the Ontario Power bus. This provides an alternative connection for supplying power from the Canadian-Niagara Power Company to the 110,000-volt transformers.

Switching Equipment, 110,000 Volts

In order to provide additional carrying capacity and switches of improved design to meet the operating conditions, the 110,000-volt disconnecting switches which were originally installed on No. 1, 4, 5 and 8 banks of 110,000-volt transformers and on the 110,000-volt main bus tie breaker are being removed and replaced with 400-ampere disconnecting switches with extra heavy pillar-type insulators.

Switchboard

The totalizing metering equipment which was mentioned in last year's Report has now been completed. The equipment measures on separate meters the total power received on the 12,000-volt feeders from the Ontario Power Company and the Canadian Niagara Power Company, and also the total power delivered to the 46,000-volt lines and 110,000-volt lines.

Water and Oil Systems

In order to provide a supply of water to Montrose Distributing Station a pump has been installed in this station for supplying water from the Niagara Station water system to a pipe line running to Montrose Distributing Station.

During the past year two 600-gallon oil tanks have been installed in the basement, for the purpose of storing circuit-breaker oil.

General

For the purpose of providing a satisfactory disposal of the drainage a sump is being built to the south-west of the station, into which all building and ground drains will empty. A pump is being installed in a pump-house adjacent to the sump, which shall automatically pump the drainage to the drain running from this station to the Ontario Power Company drains. This work was started in September, and will be completed before the end of the year.

A section of the gallery above the control room has been partitioned off, which provides a lunch room for the men employed in the station. This room has been equipped with tables, chairs, lockers and an electric stove.

Due to the damaged condition of the walls of the 12,000-volt cable tunnel in the south section of the basement, the wall and ceiling are being removed and replaced with reinforced concrete.

Niagara-on-the-Lake Municipal Station

In December, 1919, it was decided to remove the curve drawing wattmeter which was installed in this station to measure the incoming power, and to replace it by a Westinghouse graphic recording wattmeter and a recording reactive volt-ampere meter. These meters were received in the early part of the year, and their installation was completed by the Commission's Construction Department in May, 1920.

Niagara Falls Municipal Station

At the request of the Hydro-Electric Commission of Niagara Falls, engineering assistance is being given to them covering the inspection and tests on one 1,500 kv-a. 3-phase, 13,200-volt transformer which they have ordered from the Canadian Crocker-Wheeler Company. Also plans are being prepared by the Commission for the temporary installation of this transformer.

Port Colborne Distributing Station

In order to provide additional power to the Municipalities of Port Colborne and Humberstone, it was decided in the early part of the year to purchase and install additional transformer capacity at Port Colborne Station. This work is being accomplished by purchasing three 150 kv-a. 13,200/2,200-volt transformers from the Municipality of St. Mary's and installing them in the Port Colborne 30,000-volt station. The switching and metering equipment is being removed from the former 12,000-volt station, and is being installed with the 150 kv-a. transformers. A 4,000-volt cable has been laid across the canal to supply power to Port Colborne, on the west side of the canal. Humberstone will be supplied on the west side by means of the submarine cable which was installed some time ago. Complete switching and metering equipment has been installed on the 2,300-volt feeders, so that Port Colborne and Humberstone loads will be supplied and metered separately. This installation is being made temporarily in the spare transformer pocket in this station, and when conditions warrant it a station may be built for supplying power to these municipalities. This work has been practically completed, and it is expected it will be finished by the middle of November.

DUNDAS

Line Breakers

The installation of heavier capacity 110,000-volt oil circuit breakers on the lines out of Dundas Station mentioned in the last Report was completed in February, 1920.

The installation of Westinghouse graphic recording totalizing meters mentioned in the last Report was completed in November, 1919.

It was considered advisable to have better relay protection than that afforded by the straight overload relays for the power transformers in this station. Plans were made up and instructions issued in April, 1920, to install differential relays for these transformers. This installation was completed by the Commission's Construction Department in June, 1920.

It was decided to increase the capacity of the 110,000-volt oil circuit breaker feeding transformer bank No. 1 in this station by replacing the present Canadian Westinghouse type "GA" flat top breaker by a Canadian Westinghouse plain round tank breaker. Plans were prepared showing this change and instructions

issued to proceed with this work in October, 1920, and it is expected that the installation will be completed by the end of the year.

The water supply for transformer cooling was found to be inadequate and arrangements were made to supplement it by obtaining water from the Desjardins Canal. A small open channel was constructed from the canal to a settling tank on the Commission's property. The water runs from this tank through an 8-in. tile drain to the present outside well in which the water pumps are located. This work was done by the Commission's Construction Department, being completed in April, 1920.

The original septic tank proving inadequate, a larger tank was installed with better distributors, the work being completed in April, 1920.

Caledonia Distributing Station

The recording reactive volt-ampere meter mentioned in the last Report was put into service on January 31st.

Dominion Sewer Pipe Company's Distributing Station, Waterdown

The changes in the metering equipment on the Dominion Sewer Pipe feeder and the Waterdown feeder in this station referred to in the last Report were completed and the new equipment placed in service on April 23, 1920.

Hagersville Distributing Station

The recording reactive volt ampere meter and accessories mentioned in the last Report were placed in service on February 4th.

Lythmore Distributing Station

The recording reactive volt ampere meter and accessory equipment mentioned in the last Report were placed in service on February 7th.

Wood Milling Company, Copetown

The recording wattmeter and accessories mentioned in the last Report were placed in service on November 11, 1919.

Lynden Distributing Station

The recording reactive volt ampere meter and equipment mentioned in the last Report was placed in service on April 23rd.

TORONTO TRANSFORMER STATION

Differential Protection for Transformers

It was decided to install differential relay protection on each of the five banks of power transformers using H.E.P.C. air insulated current transformers on the high tension side. Overload relays (Canadian Westinghouse Company type "CO" on banks No. 1 and 2 and Condit type "A" on banks Nos. 3, 4 and 5) are provided to trip 110,000-volt transformer switches in case of sustained overloads while differential relays (Canadian Westinghouse Company type "B" and type "M" multi-contact) are provided to trip both the 110,000-volt switches and the two 13,200-volt switches on each bank in case of a breakdown in the bank.

As there was not sufficient room on the main switchboard for the relays it was decided to mount them on small ebony asbestos panels mounted on the wall near the oil switches in the high tension room. Instructions have been issued to Construction Department to do this installation. It will be completed early in 1921.

Annunciator

The installation of the annunciator referred to in the last Report to indicate which oil circuit breakers have opened automatically is now completed.

Synchronous Condensers

In the last Report it was noted that the stator of No. 2 condenser was being rewound by the Canadian General Electric Company at Peterborough. The re-winding was completed in November, 1919, and the condenser was placed in service on November 28, 1919.

In May, it was decided to have No. 1 condenser rewound, the new winding being designed to increase the capacity from 4,000 to 5,000 kv-a. and on May 7th the contract for the new coils and for the work of rewinding the armature was awarded to the Canadian General Electric Company. It is expected that the stator will be shipped to Toronto early in November and that the condenser will be in service again in December.

LONDON TRANSFORMER STATION

The three 1,250-kv-a. core type transformers which had been released from service at London Transformer Station were shipped to Woodstock Transformer Station in November, 1919, and three 2,500-kv-a. transformers from Toronto Transformer Station were temporarily installed in No. 2 pocket. The installation of the switching equipment for No. 3 transformer bank was completed in March, and on March 21st the three 2,500-kv-a. transformers were removed from No. 2 pocket and connected up permanently in No. 3 pocket. The switching equipment for No. 2 bank has been left in place, no changes being made in any of the connections.

The changes in the switching equipment and connections of No. 1 bank to accommodate the 2,500-kv-a. transformers, including the installation of the totalizing metering equipment and the differential relay equipment, were completed in July.

In February, it was decided to replace two sets of disconnecting switches in the 110,000-volt bus with a new type of switch of larger capacity. However, due to difficulty in arranging interruptions the work was not completed until October 24th. The work was carried out by the Construction Department of the Commission.

In May, arrangements were made to build a septic tank at this station. The work was done by the Construction Department of the Commission and was completed in September.

Synchronous Condenser

In April, the decision was made after careful investigation to install at London the 10,000-kv-a. synchronous condenser which was ordered from the Canadian General Electric Company as noted in the last Report. To accommodate

this condenser, a temporary building has been erected at the north-east corner of the transformer station, this building being constructed of corrugated iron sheeting on a wood frame.

The switching equipment purchased for the control of the condenser, includes three 13,200-volt oil circuit breakers, and one electrically operated field switch ordered from Canadian Westinghouse Company, 13,200-volt bus wire supports ordered from Ferranti Meter and Transformer Manufacturing Company and instruments and switchboard apparatus ordered from A. H. Winter-Joyner, Limited, and from Canadian General Electric Company.

The installation of the switching equipment is practically completed and will be ready for service in November. Shipment of the condenser was delayed due to manufacturing conditions but it will be shipped early in November, and it is expected will be placed in service during December.

Ailsa Craig Distributing Station

The new station installation mentioned in the last Report for the Ailsa Craig feeder was completed and placed in service on May 3rd. The equipment for the Parkhill feeder was placed in service on June 9, 1920.

Exeter Distributing Station

Owing to the unsatisfactory operation of the original overload relays on the incoming lines and on the Exeter, Hensall, Zurich and Dashwood feeders, they were replaced by single pole type, "PQ" Canadian General Electric Company's inverse time overload relays in September, 1920. Dry cells were installed to obtain a 12-volt D.C. tripping circuit for the breakers.

For additional safety of the attendant, screens were installed around the high tension lightning arrester in May, 1920.

The recording reactive volt-ampere meter and necessary equipment mentioned in the last Report were installed and placed in service in May, 1920.

London Municipal Station

The switching equipment mentioned in the last Annual Report for the extension to Horton Street Station, was shipped by the Canadian Westinghouse Company in March, but will not be installed until some time in 1921.

Thorndale Distributing Station

A Westinghouse graphic wattmeter was installed in this station in April, 1920, to measure the load taken by the municipality.

A Lincoln indicating demand meter and a Chamberlain & Hookhan watt-hour meter were installed in September, 1920, in the plant of Mr. W. H. Dellar, which is supplied from Thorndale Distributing Station.

. GUELPH TRANSFORMER STATION

No electrical construction work was done on this station during the year.

Acton Distributing Station

The recording reactive volt-ampere meter mentioned in the last Report was put into service March 9, 1920.

Cheltenham Distributing Station

The recording reactive volt-ampere meter referred to in last year's Report was put into service in March, 1920.

Elora Distributing Station

The recording reactive volt-ampere meter mentioned in the last Report was installed and put into service on January 2, 1920.

Fergus Distributing Station

The recording reactive volt-ampere meter on the Fergus feeder mentioned in the last Report was put into service on January 3, 1920.

On account of the increase of the load on this station, the capacity of the current transformer on the feeder was increased from 30/5 amperes to 100/5 amperes. This work was completed in October, 1920.

Georgetown Distributing Station

The recording reactive volt-ampere meter on the Georgetown feeder in this station was put into service on March 23, 1920.

Guelph Military Hospital (Formerly Central Prison Farm)

The recording wattmeter and the reactive volt-ampere meter referred to in the last Report were installed and put into service on March 22, 1920.

Ontario Agricultural College, Guelph

The installation of the recording wattmeter and the recording reactive volt-ampere meter at this distributing station as mentioned in the last Report was completed and the equipment put into service on February 11, 1920.

Rockwood Distributing Station

The Siemen's demand meter in this station was replaced by a Canadian Westinghouse graphic recording wattmeter. This equipment was put into service on April 2, 1920.

PRESTON TRANSFORMER STATION

Metering Equipment

The totalizing metering equipment mentioned in the last Report was completed and put into service on December 24, 1919.

Estimates

Estimates were prepared and submitted to the Local Commissions at Preston and Hespeler for changing their municipal stations from 6,600 volt to 13,200 volt incoming power to enable the balance of the Preston Transformer Station to be changed to 13,200 volt.

An estimate was prepared and submitted to the R. Forbes Company, Hespeler covering the changing of their supply voltage from 6,600 volts to 2,200 volts.

An estimate was prepared and submitted to Doon Mills Company for changing their voltage from 6,600 volt to 13,200 volt, with an alternative estimate for 550 volts service to be obtained by tapping the Doon line on the 4,000 volt Breslau feeder and installing a bank of 2,200/550-volt transformers at Doon.

KITCHENER TRANSFORMER STATION

Totalizing Equipment

The installation of the totalizing recording meters mentioned in the last report was completed, and the equipment put in service on January 21, 1920.

Increased Capacity

Due to increasing load on this station it was decided to replace the bank of 750-kv-a. transformers by a bank of 2,500-kv-a. transformers. Accordingly a contract was placed with the Canadian General Electric Company for four 2,500-kv-a. 63,500 to 26,400/13,200-volt single-phase water-cooled transformers for the station. Plans were made showing changes in electrical equipment necessary for the larger transformers and also for the installation of differential relay protection on both transformer banks and material ordered and instructions issued to the Construction Department to install same. Owing to the difficulty experienced in obtaining raw material for the transformers they will not be delivered until December, 1920, so that the installation cannot be completed until after that time.

To accommodate the larger transformers the main station door was enlarged and the transformer rails in the erection room moved. The transformer truck was also strengthened to increase its carrying capacity. It was found necessary to increase the capacity of the 13,200 volt feeders in this station. Instructions have been issued to the Commission's Operating Department to change the capacity of the current transformers and wattmeters on these feeders to suit new load conditions, and it is expected this work will be completed in December of this year.

Kitchener Municipal Station No. 2

In March the Kitchener Light Commissioners authorized us to proceed with plans and specifications for a new substation to be erected at the corner of Breihaupt and Edward streets, Kitchener, in line with sketches which had been submitted to them earlier in the month.

The station will be a one-storey brick building 35 feet by 20 feet by 20 feet high, with provision for two incoming 13,200-volt lines, three 1,500-kv-a. three-phase transformers, and six 2,300-volt outgoing feeders.

The station will be fed at present by one incoming 13,200 volt line through Canadian Westinghouse choke coils disconnecting switches, and a type "G. A. 3" oil circuit breaker. The proposed transformer equipment will at first consist of one bank of 500 kv-a., single phase, 25-cycle, 13,200/2,200-volt Canadian General Electric transformers, which are to be moved from the No. 1 Municipal Station. These transformers will be connected through disconnecting switches to the 13,200 volt bus, and through Canadian Westinghouse type "B-2" oil switches to the 2,300-volt bus. The low-tension switching equipment will consist of three 2,300-volt feeders, which are to be run out underground to the pole structure on Breihaupt Street. A 2,300-volt emergency bus, by which the feeder oil switches may be cut out of service for repairs, is also to be installed.

The metering equipment will consist of Weston ammeters on all low tension feeders, a Weston voltmeter, and a Westinghouse recording wattmeter and recording reactive volt-ampere meter to read the total power on the incoming 13,200-volt line.

Contract for the building was placed by the local Commission with Messrs. Dunker Bros., Kitchener, Ontario, in July, and will be completed early in November,

1920. The contract for the switching equipment was placed with the Canadian Westinghouse Company in July to be delivered in November, 1920. All the installation work inside the station, with the exception of locating the power transformers, will be done by the Commission's Construction Department. The power transformers are to be installed by the Kitchener Light Commissioners.

It is expected that this station will be ready for service early in 1921.

Waterloo Municipal Station

Due to the ever increasing load on this station the local Commission decided to increase the capacity of their station, and asked for plans and estimates on the necessary extensions. The estimate of the cost of necessary extension and changes was submitted in November, 1919. In December authorization to proceed with the extension was received, and building plans and electrical layout plans were prepared and submitted for approval.

Building

The building extension is approximately 38 feet 6 inches long, 24 feet wide, and 20 feet high, inside dimensions. It is built on the west part of the south wall of the present transformer station, with the present boiler-room wall forming the east wall of the extension, and is of white brick, to conform with the present building. It is designed to accommodate two 13,200-volt incoming line equipments, three 1,500-kv-a. and two 750-kv-a. 13,200-volt/2,300-volt 3-phase O.I.W.C. transformers, with space for transformer erection. A large archway connects the present station with the extension. In the southwest corner of the extension is a small tower extending approximately 10 feet above the building. This tower is supplied with a 10-ton chain hoist, supported in the centre of the tower for lifting the cores out of the transformers. Rails supported on I beams, 15 inches above the main floor, are provided to support the transformers. Running in front of the transformer pockets is a track runway level with the floor, on which is a 25-ton transformer truck.

The plans and specifications for the building were made by the Commission and submitted to the local Commission, who had the building constructed by a local contractor.

Electrical Equipment

The station will be fed by two 13,200-volt lines connected through Canadian Westinghouse, type "G. A. 3" oil circuit breakers, to a bus, from which connections are taken through disconnecting switches to three 750-kv-a. O.I.W.C. 26,400/13,200-volt to 2,300-volt transformers.

The present electrical equipment in the old station will be changed and re-arranged by removing the two banks of 150-kv-a. transformers and all the 13,200-volt equipment from the present station and re-arranging the low-tension equipment. The low-tension oil circuit breakers are all to be remote control hand-operated and mounted on pipe framework, on which will be mounted the low-tension buses and regulator bus, with space left for emergency low-tension buses.

The low-tension equipment is being purchased by the local Commission from the Canadian Westinghouse Company, with the exception of the auto starter for the synchronous condenser and three 13,200-volt choke coils, which are being purchased from the Canadian General Electric Company.

The installation work will be done by the Commission's Construction Department, assisted by the local Commission, and will be completed early in 1921.

Elmira Distributing Station

The three 150-kv-a. transformers and changes in equipment mentioned in the last report were put in service on January 23, 1920.

The three 75-kv-a. transformers which they replaced were taken out and shipped to Ailsa Craig Distributing Station in January, 1920.

The Westinghouse graphic wattmeter and recording reactive volt-ampere meters mentioned in last report were put into service on February 10.

St. Jacobs Distributing Station

The graphic wattmeter was re-connected from 500 to 110-volt type, and another potential transformer was supplied for it.

An extra ground wire was installed and all ungrounded equipment connected to it.

Baden Distributing Station

Westinghouse recording reactive volt-ampere meters and equipment for same for the Baden and Wellesley feeders mentioned in the last report were placed in service in April, 1920.

The three 150-kv-a. 13,200/2,300-volt, 25-cycle single phase transformers were inspected, and extra bracing of the core and coils installed and transformers replaced in service in May.

Petersburg and St. Agatha

Metering Equipment

The maximum demand meter was replaced on November 27, 1919, by a Westinghouse graphic wattmeter.

New Hamburg Distributing Station

The recording reactive volt-ampere meter mentioned in last report was installed and put into service on June 2, 1920.

STRATFORD TRANSFORMER STATION

The installation of the equipment mentioned in the last report for changing the 110,000-volt and 26,400-volt oil circuit breakers from hand-operated to electrically-operated type, including the installation of the storage battery and the moving of the switchboard to the new control room, was completed in March. The motor-operated deep-well pump was installed in January, but was not placed in service until April 7, 1920.

In March it was decided to provide differential protection for the transformers in this station. The 110,000-volt and the 26,400-volt current transformers which were required were manufactured by the Commission. The installation of this equipment was carried out by the Construction Department of the Commission, and was completed in September.

Listowel Distributing Station

The installation of three 200 kv-a. transformers in this station, as mentioned in the last report, was completed, and the equipment put into service on March 14th. The recording reactive volt-ampere meter was also put into service on the same date.

Clinton Municipal Station

The changes in the metering equipment in this station mentioned in the last report were completed and the equipment put into service on July 3.

Seaforth Municipal Station

The changes in the metering equipment in this station were completed, and the equipment put into service on May 5.

Following a suggestion by the Commission that the grounding of the apparatus in their station be improved, the Public Utilities Commission of Seaforth wrote on June 25 requesting the Commission to have the work carried out. This work was done by the Construction Department of the Commission, and was completed in August.

Mitchell Municipal Station

The recording reactive volt-ampere meter mentioned in the last report was put into service on July 5.

Tavistock Distributing Station

The recording reactive volt-ampere meter mentioned in the last report was put into service on April 30.

The bracing of the core and coils on the three 75-kv-a. transformers in this station was strengthened by the Commission's Operating Department. This work was completed on June 10.

Goderich Municipal Station

In order to obtain a more accurate indication of the load on this station, it was decided in December to purchase from the Local Commission the original metering equipment, consisting of curve-drawing wattmeter and power-factor meters with instrument transformers, and to replace the meters with Westinghouse recording wattmeter and recording reactive volt-ampere meters. This was done, and the new equipment put into service on May 9.

Milverton Distributing Station

The recording reactive volt-ampere meter and equipment mentioned in the last report were placed in service in April.

The relays on the feeder were replaced in September by single-phase Canadian General Electric type "PQ" relays, in order to improve the protection on this feeder.

Harriston Distributing Station

Owing to the unsatisfactory operation of the instantaneous and definite time relay combination on the feeder, these relays were replaced in September by three single-phase Canadian General Electric "PQ" inverse time overload relays.

The importance of the load on this feeder demands that a recording reactive volt-ampere meter and necessary equipment for same be installed. This will be done early in the new year.

Palmerston Distributing Station

The relays in Moorefield and Palmerston feeders were replaced in September by six single-phase Canadian General Electric "PQ" relays.

A recording reactive volt-ampere meter will be installed on the town feeder early in the new year.

ST. MARY'S TRANSFORMER STATION

Installation of totalizing meters for measuring total station load at 13,200 volts, and the installation of Westinghouse graphic wattmeter and reactive volt-ampere meter on the St. Mary's 13,200-volt feeder mentioned in the last report, were completed and put in service on December 22, 1919.

The 150-kv-a. transformers belonging to the Municipality of St. Mary's, which were located in the service-room at this station, were removed; also the 13,200-volt feeder across the ceiling connecting to same. The St. Mary's 13,200-volt feeder was changed to connect to a new line to the new electrical installation in the Municipal Pumping Station, to which the 2,300-volt Municipal feeder panel was removed.

The positions of the St. Mary's feeder and the St. Mary's Portland Cement Co.'s feeder were interchanged in order to avoid crossing the lines on the poles outside the station. This work was accomplished in September, 1920.

St. Mary's Municipal Station

Owing to the increased power demand at St. Mary's the local Commission decided to purchase larger transformers, and have them installed in the local pumping station, with necessary switching equipment. They accordingly purchased two 750-kv-a. three-phase oil-insulated, water-cooled Canadian General Electric Company 13,200 to 2,300-volt transformers from the Walkerville Hydro-Electric System, and had one of them placed in the pumping station. The other one is to be delivered later. At the request of the St. Mary's Commission, engineering assistance was given in connection with the new electrical installation in the pumping station and changes in the present low-voltage layout. Plans were prepared for the new installation, and the necessary new material was ordered from the Canadian Westinghouse Company. The Commission's Construction Department, assisted by the local Superintendent, installed the equipment, which was placed in service in August, 1920.

The three 150-kv-a. single-phase O.I.S.C. 13,200-volt to 2,300-volt Municipal transformers which were installed in the St. Mary's High-Tension Station, were purchased and shipped to Port Colborne. The low-voltage feeder panel removed from the Commission's Transformer Station was installed in the local pumping station.

WOODSTOCK TRANSFORMER STATION

Metering Equipment

Totalizing meters mentioned in last report were installed and placed in service on January 29, 1920.

High Tension Line Tap

It was considered advisable to sectionalize the second high-tension line at this point and connect same into this station. This was accomplished by installing six outdoor disconnecting switches on a pole structure, with taps off between these switches carried through disconnecting switches and standard entrance bushings into the station and attached to the high-tension buses. This installation was done by Commission's Operating Department, and was completed and placed in service in May, 1920.

Increased Capacity

Due to increased load on the station, it was decided in December, 1919, to increase the transformer capacity of station. The three 1,250-kv-a. 63,500/13,200-volt single-phase Canadian General Electric Company transformers were removed from London Station and installed in this station, replacing the three 750-kv-a. transformers which were originally there. One of the 750-kv-a. transformers was shipped to St. Thomas Transformer Station, two were stored outside the station, the present spare transformer being left in the station.

Transformer Protection

Differential relay protection for these transformers was also installed. The installation work was done by the Construction Department, being placed in service in December, 1919.

Woodstock Municipal Station No. 2

At the request of the Woodstock Water and Light Commission in June, engineering assistance was given in connection with the purchase of three 300-kv-a. single-phase, 25-cycle oil-insulated self-cooled 26,400-13,200/2,300-575-volts transformers. These were purchased from the Packard Electric Company by the local Commission on recommendation of the Provincial Commission, and are to be delivered in January, 1921.

Beachville Distributing Station

The installation of the additional metering equipment in the station mentioned in the last report was completed, and the equipment put into service.

Norwich Distributing Station

The three 75-kv-a. Packard transformers recorded as being purchased in the last report were installed in this station, replacing three 50-kv-a. Siemen's unit. The work was completed, and the new transformers put into service on April 1, 1920. The new metering equipment mentioned in the last report was put into service; the wattmeter on November 19, 1919, and the reactive volt-ampere meter on June 10, 1920.

As a safeguard against accidental contact, screens were placed around the high-tension arrester and oil switch. This work was completed on September 29, 1920.

In order to improve the ventilation in this station, louvers were installed in the doors, the work being completed on May 31.

Otterville Metering Station

In order to improve the metering records, the original demand meter at this station was replaced on November 22, 1919, by a Westinghouse graphic wattmeter.

Tillsonburg Municipal Station

At the request of the local Commission at Tillsonburg we inspected and tested at the shop of the Canadian General Electric Company three 250-kv-a. single-phase transformers with transfer switches which had been purchased by the local Commission.

The recording reactive volt-ampere meter mentioned in the last report was put into service on June 11, 1920.

Burgessville Metering Station

The original graphic wattmeter in this installation was replaced by a Canadian Westinghouse graphic wattmeter in a larger box. This work was completed on November 21, 1919.

ST. THOMAS TRANSFORMER STATION

Metering Equipment

The totalizing recording meter installation mentioned in last report was completed in January, 1920.

Foot Bridge

The construction of an extension on the London and Port Stanley railway bridge across Kettle Creek to form a foot bridge for the convenience of the operators in going to and from Transformer Station, was completed in April.

Rotary Converters

It was finally decided not to install the flash barriers on the three 500-kv-a. rotary converters, as mentioned in last report. A high-speed circuit breaker is to be used instead of flash barriers to trip out on sudden heavy surges. This breaker has been purchased from the Canadian General Electric, and will be installed in St. Thomas early in 1921.

Spare Transformer

One Canadian General Electric 750-kv-a. single-phase 63,500/13,200-volt water-cooled transformer, recently released from Woodstock Transformer Station, was installed in this station as a spare in February, 1920. Due to the insufficient supply of water for cooling the transformers, arrangements were made to drill a well to obtain more water, but the well will not be completed until November. In the meantime a small cooling tower was erected in the cooling pond in September to assist in cooling the water as it comes from the transformers.

St. Thomas Municipal Station

In February the local Commission requested engineering assistance in connection with the installation of a 2,300-volt feeder panel, and equipment for the control of the waterworks feeder.

In order to line up with the present equipment the panel was ordered from the Canadian Westinghouse Company. This will be delivered about November, so that the installation will be completed before the end of the present year.

In September the local Commission requested engineering assistance in connection with the purchase and installation of the necessary metering and switching equipment for the spare 750-kv-a. three-phase transformer in this station.

This equipment is being purchased from the Canadian Westinghouse Company, but owing to the long delivery given on both the high and low tension equipment the installation will not be completed until the early part of 1921.

Aylmer Distributing Station

The installation of the recording reactive volt-ampere meter mentioned in the last report was held up, and will not be completed until early in 1921.

Protective screens were installed around the Siemen's lightning arrester in May, 1920.

Dutton Distributing Station

The recording reactive volt-ampere meter mentioned in the last report was put in service on June 8.

Port Stanley Distributing Station

The third 75-kv-a. transformer mentioned in last report was repaired and placed in service in February, making a bank of three 75-kv-a. transformers. The two 50-kv-a. Siemen's transformers which were used temporarily in parallel on one leg of the delta bank in this station were removed and shipped to the Commission's Stores, Toronto.

The installation of Canadian Westinghouse recording reactive volt-ampere meter on the Port Stanley feeder, mentioned in last report, was completed in June. In August, screens were installed around the high-tension arrester.

In August authorization was given to increase capacity of station to 300-kv-a. in order to meet summer load. This will be done early in the new year.

BRANT TRANSFORMER STATION

Installation of the four Canadian Westinghouse Company 2,500-kv-a. transformers and of the differential relay protection mentioned in last report was completed on April 11, 1920.

The ground-detector equipment mentioned in last report was completed and put into service on the same date.

The operator's cottage mentioned in the last report was completed in January.

Two alarm bells were installed in operator's cottage on September 2, 1920, one to ring when a high-tension switch trips out, and the other to ring when a low-tension switch trips out.

The Canadian Westinghouse Company type "OA" current transformers, 50-25/5-5 amperes on the Brantford feeders (No. 1253 and No. 1254) were re-wound for 100-50/5-5 amperes by the Operating Department. This work was completed and the transformers returned to service in May, 1920. In order to accomplish this, the two current transformers (30-15/5-5 ampere) on feeder No. 1256 were re-wound for 60-30/5-5 ampere ratio to use in feeders No. 1253 and No. 1254, while the respective current transformers were being re-wound.

A 110,000-volt switching structure, sectionalizing high-tension lines C2 and D2, and tapping these lines through disconnecting switches into Brant Station, was installed by Operating Department and placed in service on May 22, 1920.

G. W. Macfarlane Engineering Company, Paris

Metering Equipment

In order to meter the power delivered to the G. W. MacFarlane Engineering Company at 550 volts, a metering equipment was installed at their plant. A graphic wattmeter was purchased from the G. W. MacFarlane Company and a graphic reactive volt-ampere meter, two 160/5-ampere current transformers, and two 500/100-volt potential transformers were purchased from the Canadian Westinghouse Company. This equipment was put into service on July 9, 1920.

Simcoe Municipal Station

The recording reactive volt-ampere meter mentioned in the last report was placed in service on June 4, 1920.

Waterford Distributing Station

The recording reactive volt-ampere meter mentioned in the last report was put into service on July 4.

Wolverton Milling Company

Metering Equipment

On account of the importance of the load at the Wolverton Milling Company's plant at Wolverton, Ontario, a recording reactive volt-ampere meter was purchased and installed, being put into service on July 13.

COOKSVILLE TRANSFORMER STATION

The station totalizing metering equipment mentioned in our last report was installed by the Commission's Operating Department, and placed in service in January, 1920.

The differential relay protection for the power transformer bank, referred to in the last report, was installed by the Commission's Construction Department. The work was completed and the equipment placed in service in August, 1920.

Etobicoke Distributing Station

The operator's cottage mentioned in last report was completed in December, 1919.

Owing to the growth and importance of the load in this district, one Canadian Crocker Wheeler 1,500-kv-a. three-phase, 25-cycle O.I.W.C. 45,700/26,400/13,200 volts to 2,300/575 volts transformer, was shipped from Welland Municipal Station and installed in position in the station as a spare in March, 1920.

In February, authorization was given to purchase and install one 1,500-kv-a. three-phase, 25-cycle, 26,400-13,200/4,000-2,300-575-volt O.I.S.C. transformer, together with the necessary high-tension and low-tension switching equipment.

The transformer was purchased from the Canadian Westinghouse Company, and will be installed by the Commission's Construction Department. The switching equipment was purchased from the Canadian General Electric Company, who are to install the same. This work will be completed early in 1921.

In order to facilitate the operation of this station with one operator, an alarm bell was installed in the operator's cottage in July. This bell is connected up to ring when any low-tension oil breaker opens automatically or when the temperature of the power transformers becomes too high.

Arrangements are being made to install a Canadian General Electric graphic recording wattmeter on the service load early in 1921.

Mimico Distributing Station

The bracing of the core and coils of the 150-kv-a. transformers was strengthened by the Operating Department.

In order to improve the power records of this station, the curve-drawing wattmeter on the Mimico feeder was taken to Stores, and Westinghouse graphic watt-

meters and reactive volt-ampere meters were installed on the Mimico and Etobicoke Township Feeders.

This equipment was placed in service on June 5, 1920.

Port Credit Distributing Station

The removal of the wattmeter on the outgoing feeder in this station from the Toronto Township 4,000-volt outgoing feeder to Toronto Stores, and the installation of a Westinghouse polyphase graphic wattmeter and a reactive volt-ampere meter, with the necessary additional equipment for same, was authorized in April, and the meters installed and placed in service in September, 1920.

In June, 1920, the low-tension arresters were placed higher up on the wall so as to reduce the danger of the operator coming into accidental contact with them.

Toronto Milling Company, Streetsville

On account of the importance of the load at this plant a recording reactive volt-ampere meter is being installed on the incoming 4,000-volt line. This work will be completed early in 1921.

Streetsville Distributing Station

As it was decided to measure the power supplied at various customers' plants, the installation of the recording reactive volt-ampere meter mentioned in the last report was not made.

One 3-kilowatt service transformer for lighting this station was installed. On account of the increased load in the station the 10/5-ampere current transformers in the incoming feeder were replaced by 20/5-ampere current transformers on August 15, 1920.

Port Credit Brick Company

Metering Equipment

The curve-drawing wattmeter on the incoming line to this station was removed to Stores, and a Westinghouse graphic wattmeter was installed, being put into service in December, 1919.

Milton Municipal Station

The installation of the recording reactive volt-ampere meter and the changes in the current transformers in this station were completed, and the equipment put into service on February 12, 1920.

Woodbridge Distributing Station

The installation of recording reactive volt-ampere meters on the Woodbridge and Bolton feeders in this station, as mentioned in the last report, were completed and the equipment put into operation in April.

KENT TRANSFORMER STATION

The removal of the temporary bank of three 750-kv-a. transformers and installation of the permanent bank of three 1,250-kv-a. units, as mentioned in the last report, were completed in April, 1920.

The installation of the differential relay protection on both transformer banks and of the totalizing metering equipment, as referred to in the last report, was completed in August, 1920. The increasing of the capacity of the Canadian Westinghouse Company's type "E" 26,400-volt oil-circuit breakers has not yet been completed owing to delay in delivery of material.

On account of increase of load, instructions have been given to the Operating Department to re-wind the Canadian Westinghouse Company's 26,400-volt, type "OA" 80-40/5-5-ampere current transformers for a ratio of 160-80/5-5 amperes, and to install a third Canadian Westinghouse Company 160-80/5-ampere transformer on the middle phase. This work will be completed about February, 1921.

Blenheim Distributing Station

The recording reactive volt-ampere meter mentioned in the last report was put into service on May 13th.

Bothwell Distributing Station

On account of the importance of the load at this station, a Canadian Westinghouse recording reactive volt-ampere meter was purchased and installed, being put into service on June 24, 1920.

In order to supply power to the Municipalities of Glencoe, Newbury, and Wardsville, one 4,000-volt feeder switching equipment was purchased from the Canadian Westinghouse Company and installed by the Commission's Construction Department. This equipment was put into service on August 13, 1920.

Chatham Municipal Station

The two high-tension feeders to this station which were operated temporarily at 13,200-volt from October 12, 1919, being fed from the temporary 13,200-volt bank of transformers at Kent Transformer Station, were changed back to 26,400-volt in April, 1920, when the permanent bank was put into regular operation.

Dresden Distributing Station

The additional metering equipment mentioned in the last Annual Report was completed and put into service on May 21.

Four Canadian Westinghouse Company's type "KA" 60/30/5-ampere current transformers on the feeders from this station were replaced in August, 1920, by transformers of the same type, rated 50/5 amperes. The original transformers were sent to the Commission's Storehouse at Toronto.

Forest Distributing Station

The additional metering equipment for this station, as mentioned in the last report, was put into service on June 21.

Petrolia Distributing Station

In order to obtain better relay protection, the relays on the incoming line and on the Wyoming and Petrolia feeders were replaced in September, 1920, by single-pole Canadian General Electric type "PQ" relays.

Ridgetown Distributing Station

The recording reactive volt-ampere meter, mentioned in the last report, was put into service on May 13.

The Canadian Westinghouse Company's type "KA" 20/10/5-ampere current transformers on outgoing feeders in this station were replaced by current transformers of the same type, rated 50/5 amperes. The original transformers were sent to the Commission's warehouse at Toronto.

Sarnia Municipal Station

After examining the tenders on the 1,500-kv-a. transformer referred to in the last report, the Commission recommended to the Sarnia Hydro-Electric System that the transformer be purchased from Moloney Electric Company of Canada, and on November 14, 1919, the order was placed per this recommendation. The switching equipment required was ordered from the Canadian General Electric Company. The transformer will probably be shipped in November. The switching equipment has already been delivered.

Estimates of the cost of the 4,000-volt emergency bus, also referred to in last report were given to the Sarnia Hydro-Electric System, who requested the Commission in January to proceed with the drawings of this bus and to purchase the material required. The greater part of the material was later ordered from the Canadian General Electric Company.

In May the Sarnia Hydro-Electric System decided to improve the appearance of the pole structure outside the station and to provide better operating conditions by taking the power feeders and commercial lighting feeders out of the station underground.

All of this work is now under way, and it is expected that it will be completed in December or January next. The work in the station is being done by the Construction Department of the Commission, and the work outside the station by the Sarnia Hydro-Electric System.

ESSEX TRANSFORMER STATION

The installation of the screens and barriers for protecting the operator against contact with the 26,400-volt wiring were completed on March 24, 1920.

In order to obtain a record of the total power at this station, a totalizing metering equipment, consisting of one graphic wattmeter, one graphic reactive volt-ampere meter, and one watt-hour meter, was purchased from the Canadian Westinghouse Company, installed by the Commission's Operating Department, and put into service on December 3, 1919.

The four-type "OA" 26,000-volt current transformers on the Windsor feeders (No. 1553 and No. 1554) are being re-wound for 80/40-5/5 amperes by the Operating Department, and a third current transformer, rated at 80/40/5 amperes, has been purchased from the Canadian Westinghouse Company for use in the middle phase. It is expected that this equipment will be put into service in January, 1921.

Windsor—Sandwich, Windsor and Amherstburg Railway

Rotary Converter Equipment

In order to increase the power supply to the Sandwich, Windsor and Amherstburg Railway (Essex Division, Hydro-Electric Railways) it was decided in July,

1920, to install a 500-k.w. rotary converter at the Railway Steam Plant in Windsor. This converter is to be supplied with power at 25 cycles from the Windsor Municipal Station. One of the Municipal 4,000-volt feeders is being extended for this purpose.

In August, 1920, a 500-kilowatt General Electric rotary converter, with direct-current panel and equipment, was purchased from McGovern and Company, Montreal. It will be delivered at Windsor early in November. One 570-kv-a. three-phase transformer, stepping down from 4,000-volt delta to six-phase rotary voltage, was purchased from the Packard Electric Company in August. This transformer will be delivered in November. The incoming line-switching equipment was purchased from the Canadian Westinghouse Company.

This equipment will be installed by the Commission's Construction Department in a galvanized iron building about 18 feet by 30 feet, built on to the southwest corner of the present steam plant. The 600-volt D.C. leads from the rotary are to be taken into the present station and connected to the present D.C. buses.

It is expected that this equipment will go into service early in December of this year.

Windsor Municipal Station

In order that the Windsor Hydro-Electric System will be in a position to take care of future load when power from the Queenston-Chippewa Development is available, they requested the Commission on October 28, 1919, to prepare designs for extension to the present station to accommodate four incoming 26,400-volt lines, five 1,500-kv-a. three-phase transformers, and sixteen 4,000-volt outgoing feeders. Three alternative designs, somewhat on the lines of the Etobicoke Distributing Station, were prepared and submitted to the Windsor Hydro System in April, 1920.

Leamington Distributing Station

The maximum demand watt-hour meter referred to in last report was installed temporarily on October 15. It is the intention to provide better and more complete low-tension switching and metering equipment in this station. This work will be commenced as soon as the drawings are completed.

Canard River Distributing Station

The two 10-kv-a., 60-cycle transformers removed from this station in 1919, were transferred to Priceville Distributing Station, on the Eugenia System, in September.

Amherstburg Distributing Station

The three 100-kv-a., 60-cycle transformers which were stored in Amherstburg Station, will be transferred to Orangeville Distributing Station, on the Eugenia System in November.

Essex Distributing Station

The three 50-kv-a., 60-cycle transformers which were stored at Essex were transferred to Teeswater Distributing Station, on the Eugenia System, in September.

Amherstburg

A Westinghouse recording wattmeter was installed in the Distributing Station of the Brunner-Mond Canada, Limited, by the Operating Department of the Commission, the installation being completed on May 20.

YORK TRANSFORMER STATION

The permanent pump-house mentioned in last report was completed, and two Canadian Blower and Forge Company's pumps driven by Canadian Westinghouse 20 horse-power, 3-phase, 550-volt induction motors, were installed and placed in service in February.

In August a Westinghouse graphic voltmeter was installed to read the low-tension bus voltage.

Arrangements are being made to install a General Electric graphic wattmeter on the service load early in the new year.

EUGENIA SYSTEM

EUGENIA FALLS GENERATING STATION

All equipment in the Eugenia Falls Generating Station, mentioned in our last report as being installed at the end of that period, was completed in January, 1920. Tests were made on the new 2,820-kv-a. 4,000-volt Canadian Westinghouse generator during February prior to placing this unit in permanent service. The Westinghouse voltage regulator was adjusted by the manufacturer and placed in service on the system, along with the new unit, on February 29, 1920.

Figure 1 shows a view of the exterior of the Eugenia Falls Generating Station, with penstock and surge tank, and Figure 2, the interior of the Generating Station.

Durham Cement Company Distributing Station

Instructions were received in August, 1920, for the dismantling of all electric equipment owned by the Hydro-Electric Power Commission in the Durham Cement Company's Distributing Station and the storing of this equipment in this building pending disposition. This work was handled by the Construction Department of the Commission, and was completed in October.

Mount Forest Distributing Station

As it has been found that the 22,000-volt multigap arrester in this station did not afford adequate protection for the lightning conditions experienced, instructions were received in December, 1919, to replace this with an arrester which would stand more severe service. An "Oxide Film" arrester was purchased from the Canadian General Electric Company in January and installed by the Commission's Construction Department in May, 1920.

The installation of the recording reactive volt-ampere meter, noted in our last report, was completed by the Operating Department of the Commission and placed in service January 23, 1920.

In order to improve the protection on the feeder from this station, the original relays were placed in August with type "PQ" relays supplied by the Canadian General Electric Company.

Priceville Distributing Station

Instructions were received in June, 1920, for the construction of a pole-type station at Priceville with one 2,200-volt feeder. This station is to be fed from the two 2,200-volt lines from Eugenia Falls Generating Station. Plans were prepared and forwarded to the Construction Department of the Commission in September, 1920.

This station will be connected to the 22,000-volt lines through H.E.P.C. air-break switches. Delta-Star choke coils and fuses have been purchased and protection to equipment will be given by Delta-Star arresters. The transformer equipment will consist of two 10-kv-a. single-phase, 60-cycle, 22,000/2,200-volt General Electric Company transformers which have been transferred from Canard River, Essex County System, where they have been held pending disposition. Outdoor-type current and potential transformers and a Lincoln demand meter are being installed for metering purposes.

It is expected that this station will be ready in December, 1920.

Orangeville

Instructions were received in October, 1920, to replace the three 150-kv-a. 60-cycle Moloney electric power transformers in the Orangeville Distributing Station with three 100-kv-a. 60-cycle General Electric transformers from Amherstburg Distributing Station, Essex County System. Instructions have been issued covering this change. The Moloney transformers will be shipped to Walkerton for service in the Walkerton H.E.P.C. Stone Quarry Distributing Station.

The installation of the Westinghouse graphic-recording reactive volt-ampere meter in this station, noted in our last report, was completed by the Operating Department of the Commission and placed in service March 19, 1920.

Dundalk Distributing Station

The importance of the load on the Dundalk feeder in this station warranted the purchase and installation of a Westinghouse graphic-recording reactive volt-ampere meter and its necessary equipment on this feeder. This work was authorized in March. The meter was obtained from the Port McNicoll Distributing Station and installed by the Operating Department of the Commission, being placed in service on April 30, 1920.

Chesley Distributing Station

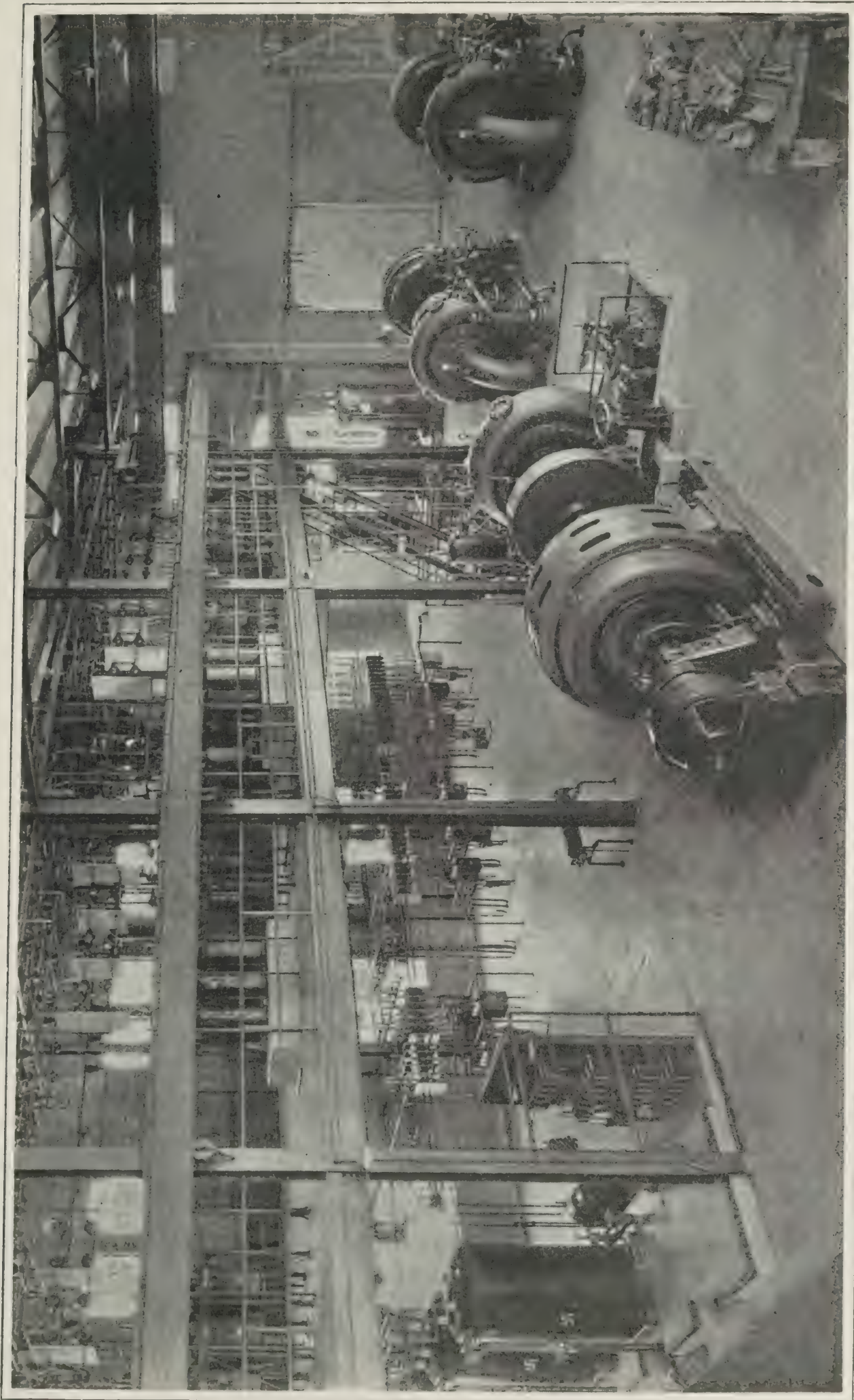
The installation of the recording reactive volt-ampere meter on the Chesley feeder panel in this station, mentioned in our last report, was completed by the Commission's Operating Department, and the meter placed in service January 29, 1920.

Shelburne Distributing Station

The installation of the recording reactive volt-ampere meter on the Shelburne feeder panel in the Shelburne Distributing Station, mentioned in our last report, was completed by the Commission's Operating Department, and the meter placed in service March 22, 1920.

Hanover Distributing Station

To provide increased transformer capacity at Hanover Distributing Station, it was decided in January, 1920, to replace the bank of three 125-kv-a. transformers feeding the town load, and the bank of three 100-kv-a. transformers feeding the Hanover Cement Company's plant, with two 750-kv-a. three-phase, 60-cycle, 38,000-volt Star, 22,000-volt delta to 4,000-volt Star, 2,300-575-volt delta outdoor type O.I.S.C. transformers.



General interior view, Eugenia Falls Generating Station.



Eugenia Generating Station, Penstock and Surge Tank.

Tenders were called for in March, 1920, and the contract for these transformers was placed with the Packard Electric Company.

It has not been a previous custom to use three-phase outdoor transformers of this capacity on this system. However, to dispense with alterations to the building, it was decided to adopt this course. Both transformers were installed on reinforced concrete platforms outside the building, and disconnecting switches inserted to disconnect them from the bus. Additional feeder equipment was ordered for the 2,300-volt line to the Hanover Cement Company, this equipment being installed inside the station.

The outdoor pole-type station, formerly used to supply the Hanover Portland Cement Company, was dismantled and this equipment shipped to Holyrood.

The three 125-kv-a. transformers used to feed the Hanover town load were shipped to Kincardine for use in the Kincardine Distributing Station now under construction.

These changes were carried out to allow for the future installation of a second 22,000-volt incoming line which will likely be constructed in the spring of 1921.

These changes were made by the Commission's Construction Department, and the change over completed August 29, 1920.

Further instructions were received September 29, 1920, to the effect that the Hanover town load had increased to such an extent that it was necessary to install additional transformer capacity to take care of increased load from the town.

It was decided to purchase one three-phase 750-kv-a. transformer identical with those previously purchased, and tenders were called for September, 20, 1920.

This contract was let to the Packard Electric Company in October, 1920. Drawings are being prepared to cover this new installation. The transformer will be delivered in December, 1920, and put into operation early in 1921.

BRUCE COUNTY SYSTEM

Holyrood Distributing Station

Instructions were received in May, 1920, for the construction of a pole-type distributing station and brick meter-house on a site purchased by the Commission at Holyrood. This station is to feed the municipalities of Ripley and Lucknow at 4,000 volts. Plans and specifications have been prepared, which have been turned over to the Commission's Construction Department, with instructions to carry out the work. The brick meter-house was erected by the Commission in September, 1920.

The station will be fed from a branch 22,000-volt line from the main transmission line now being erected between Hanover and Kincardine.

The pole-structure equipment and transformers have been transferred from Hanover Distributing Station No. 2, the transformers in this connection being a bank of three 100-kv-a. outdoor type 22,000-2,200-volts O.I.S.C. of General Electric manufacture. The switching equipment in the meter-house comprises two 4,000 volt feeders, with the necessary panels, switches, meters and relays. The panels were supplied by the Davis Slate Company, and drilled by the Production and Service Department of the Commission.

The metering equipment consists of General Electric ammeters, a Weston voltmeter and Westinghouse recording wattmeters and recording reactive volt-ampere meters.

The installation of this equipment is now being carried out by the Commission's Construction Department, and it is expected that the station will be placed in service the latter part of 1920.

Kincardine Distributing Station

Instructions were received in June, 1920, for the construction of a 22,000-volt Distributing Station at Kincardine, with one 2,300-volt feeder for service to the municipality.

Instructions at this date covered a type "H" brick station. However, in August, the municipality requested that a space of 33 feet by 31 feet in old power-station be used to house the Commission's apparatus. Plans and specifications were prepared by the Commission for the remodelling of this building, and forwarded in September to the municipality, who are now taking care of this work.

This station will be fed by one 22,000-volt line from Eugenia through H.E.P.C. standard 40,000-volt air-break switch, choke coils and fuse holders, and protection to equipment will be given by Delta-Star lightning arresters. The transformer equipment will consist of a bank of three 125-kv-a., single-phase, 60-cycle, 22,000-2,300/575-volt Canadian Westinghouse transformers, which are being transferred from Hanover Distributing Station. Provision is also being made for the connecting of a 150-kv-a. synchronous condenser to the line at this point, and engineering assistance is being given to the municipality in the arrangement of apparatus and the purchase of additional equipment. The installation in a new location of the 15-k.w. constant current transformer and Anderson type "L" time switch equipment owned by the municipality is also being made by the Commission.

The switching equipment will consist of one outgoing 2,300-volt feeder equipped with a Westinghouse oil circuit breaker current and potential transformers, Canadian General Electric relays, and Garton Daniel arrester. Metering equipment comprises Canadian General Electric ammeters, Weston voltmeter and Westinghouse graphic wattmeter and recording reactive volt-ampere meter.

This station will be ready for service in December, 1920.

Wingham Distributing Station

Instructions were received in June, 1920, covering the construction of a type "G" 22,000-volt brick distributing station at Wingham on a site adjacent to the present Wingham power house. Plans and specifications were prepared and have been forwarded to the Construction Department of the Commission, who will carry out this work. The building was completed in September, 1920.

This station will be fed by one 22,000-volt incoming line through H.E.P.C. air break switch, choke coils, Canadian General Electric 22,000-volt oil circuit breaker, and the equipment is protected by Delta-Star arresters. The transformer equipment will consist of one bank of three 250-kv-a. single phase, 60-cycle, 22,000-2,300/575 O.I.S.C. Canadian General Electric Company's transformers, which have been transferred from the Durham Cement Company's Distributing Station. The low tension switching equipment will consist of two 2,300-volt feeders to the municipality equipped with Garton-Daniel arresters. The metering equipment consists of General Electric ammeters, Weston voltmeter, Westinghouse graphic wattmeter and recording reactive volt-ampere meter.

The construction work is now progressing favourably and the station will be ready for service in December, 1920.

Engineering assistance is also being given in connection with the installation of the constant current transformer, Anderson time-switch and synchronizing connections for the operation of the Wingham Municipal Generating Station in parallel with the Eugenia System on the 2,300-volt bus.

Teeswater Distributing Station

Instructions were received in May, 1920, for the construction of a type "H" brick distributing station at Teeswater. Plans and specifications were prepared and are now in the hands of the Commission's Construction Department. The building was erected by the Commission in September, 1920.

This station will be fed by one 22,000-volt branch line from the main trunk line recently erected from Hanover to Kincardine. H.E.P.C. standard air break switch fuses and choke coils are being installed in this station and protection to equipment is being given by Delta-Star outdoor type lightning arresters.

The transformers to be used are a bank of three 50-kv-a. single phase, 60-cycle, 22,000-2,200-volt outdoor type of General Electric manufacture. These transformers are being transferred from Essex Transformer Station, Essex County System, where they have been held in storage.

The switching equipment will comprise one 4,000-volt feeder equipment. The panel used in this connection was purchased from the Davis Slate Company. A Westinghouse oil circuit breaker, graphic wattmeter and graphic recording reactive volt-ampere meter are being used.

Canadian General Electric relays, ammeters and a Weston voltmeter are also used for this service.

Prints of all drawings were forwarded to the Construction Department, September 25, 1920, and construction work on this station commenced October 11, 1920.

It is expected that this station will be ready for service the latter part of November, 1920.

Engineering assistance is also being given in connection with the installation of a constant current transformer and Anderson time switch, this equipment being the property of the municipality.

Walkerton H.E.P.C. Stone Quarry Distributing Station

Instructions were received in October for the construction of a distributing station near Walkerton to feed 500 horse power to the Commission's stone quarry at 2,200 volts. Three 150-kv-a. single phase transformers are being obtained from the Orangeville Distributing Station. Drawings have been prepared covering this work and will be forwarded to the Commission's Construction Department early in November. The transformers and switchboard will be housed in a wooden building 22 feet by 10 feet. H.E.P.C. choke coils, fuse holders, and Delta-Star arresters will be used for the protection of this station equipment on the incoming 22,000-volt line. The 2,200-volt feeder equipment will comprise one Condit oil circuit breaker, three Ferranti ammeters, Canadian Westinghouse type "B" relays, Canadian General Electric current and potential transformers and Westinghouse graphic wattmeter and recording reactive volt-ampere meter. The switchboard is being obtained from Toronto storehouse.

It is expected that the station will be put into operation in December, 1920.

SEVERN SYSTEM

BIG CHUTE GENERATING STATION

The work of changing the switching equipment referred to in the last Report was completed in July. The three horse-power motor for operating the head gates was installed in July.

The storage battery previously used in the Eugenia Falls Generating Station has been shipped to Big Chute. It is the intention to have this battery put in good condition and installed in Big Chute Station to operate the oil circuit breakers.

Port McNicoll Distributing Station

On account of the small load on this station, the Canadian Westinghouse graphic wattmeter was taken from the metering equipment and sent to the Dundalk Distributing Station. It was replaced by a General Electric curve drawing wattmeter which had been removed from Barrie Distributing Station.

Waubauskene Distributing Station

A graphic frequency meter was installed in the Waubauskene Station to provide a record of the frequency on Eugenia and Severn Systems. This meter was first placed in service on November 20, 1919.

Collingwood Distributing Station No. 1

Owing to the fact that the 22,000-volt Siemen's resistance arrester was not giving adequate protection on the Eugenia Tie Line at the Collingwood Distributing Station end it was decided to replace this arrester by a type more suitable for the severe lightning disturbances in this district.

A Delta-Star 22,000-volt arrester was purchased for this installation in August, 1920, and the shipment made to Collingwood in October, 1920. Instructions have been issued to the Operating Department to install this arrester on the parapet roof, immediately above the incoming Eugenia Tie Line. The Siemen's arrester will be left intact, disconnected from the system and will be used for emergency service only. The installation of the new arrester will be made in November, 1920.

Alliston Distributing Station

Load conditions in the Municipality of Alliston in January necessitated the increased transformer capacity in the Alliston Distributing Station.

Instructions were received in January, 1920, authorizing the purchase and installation of three 75-kv-a. single phase, 60-cycle transformers to replace the three 40-kv-a. transformers then in service.

Tenders for transformers were called for in January, 1920, and the contract placed with the Packard Electric Company. The new transformers arrived at Alliston in March, 1920, and were installed and placed in service March 7, 1920.

The three 40-kv-a. transformers were shipped to the H.E.P.C. storehouse, Toronto, for repairs and overhauling and are being held at Toronto pending disposition. The change over was made by the Commission's Construction Department.

The installation of the recording reactive volt-ampere meter in the Alliston feeder noted in our last Report was completed by the Operating Department of the Commission and placed in service March 16, 1920.

Barrie Distributing Station

The changes in the metering equipment in this station, as noted in our last Report, was completed by the Operating Department and the meters placed in service March 13, 1920.

One of the original General Electric meters was shipped to Port McNicoll where it was installed in the Port McNicoll Distributing Station. The other meter was shipped to Toronto storehouse.

Thornton Distributing Station

Severe lightning disturbance on the section of line in the neighbourhood of Thornton necessitated more adequate protection of the equipment in the Thornton Distributing Station. The purchase of a 22,000-volt Delta-Star lightning arrester was authorized as noted in our last Report, and its installation was completed March 22, 1920.

Elmvale Distributing Station

Installation of the additional metering equipment mentioned in our last Report was completed and the equipment placed in service March 7, 1920.

Stayner Distributing Station

The reactive volt-ampere meter mentioned in the last Report was installed by the Commission's Operating Department and placed in service on March 1, 1920.

WASDELL'S SYSTEM

Kirkfield Distributing Station

Instructions were received in December, 1919, for the construction of a type "H" Distributing Station on a site provided by the Kirkfield Crushed Stone Company near Kirkfield, to supply power to the Crushed Stone Company at 575-volt, and also to the Municipality of Kirkfield at 4,000 volts. The contract for the erection of a cement building to house the Commission's equipment was given to the Kirkfield Crushed Stone Company, who completed the building in March. Tenders were called in January for the supply of three 75-kv-a. single-phase, 60-cycle O.I.S.C. 22,000/2,300-575-volt power transformers. This order was placed with the Packard Electric Company, January 10, 1920, the shipment to Kirkfield being made in March.

This station is fed by one 22,000-volt line from the Wasdell's Falls Generating Station through H.E.P.C. standard air-break switch, and fuses and Canadian Westinghouse choke coils. The equipment is protected by Delta-Star outdoor type lightning arresters. Switching equipment was provided for two outgoing feeders, the Kirkfield town feeder having three 10-kv-a. step-up transformers for feeding

4,000-volt power to the town. All switchboard equipment was purchased from the Canadian Westinghouse Company with the exception of the municipality feeder panel which was purchased from the Davis Slate Company, and the low voltage lightning arresters which are of Garton-Daniels manufacture.

The installation of all equipment was made by the Commission's Construction Department, and the station placed in service April 22, 1920.

RIDEAU SYSTEM

HIGH FALLS GENERATING STATION

Generating Station Equipment

The construction of the Generating Station at High Falls, which was described in last year's Report was sufficiently advanced by May 1st that power could be supplied from it to the Rideau System. The 875-kv-a. generator supplied power through a 750-kv-a., three-phase transformer installed temporarily beside the temporary substation. On July 15th all the generating units and transformer banks with the permanent switching equipment except the voltage regulator, were placed in regular operation.

Local Services

A permanent 550-volt line has been erected to carry power and lighting to the gate house and cottage. Lighting has been provided in the gate house, along the dam and sluiceways and along the roadway to the cottage.

A septic tank has been installed and connected to the cottage.

A small pump-house was erected on the river shore just above high tail water level and a "Wesco" domestic pumping outfit was installed in it to supply water to the operator's cottage. The water intake for this was taken from a cribbing built in the river about two hundred feet from the shore.

Illustrations

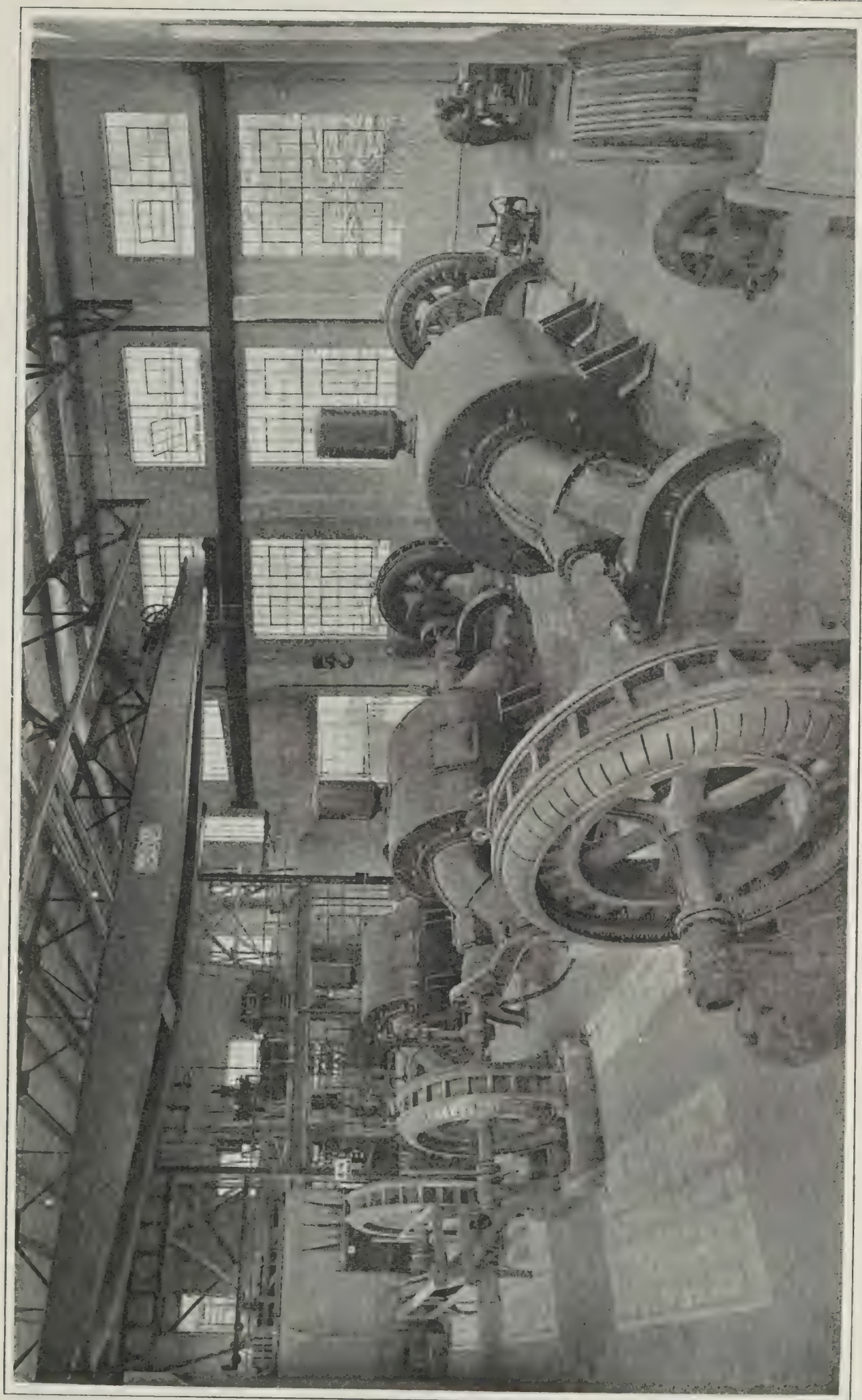
Accompanying illustrations show the exterior and surroundings of the power house, also an interior view of same.

Carleton Place Distributing Station

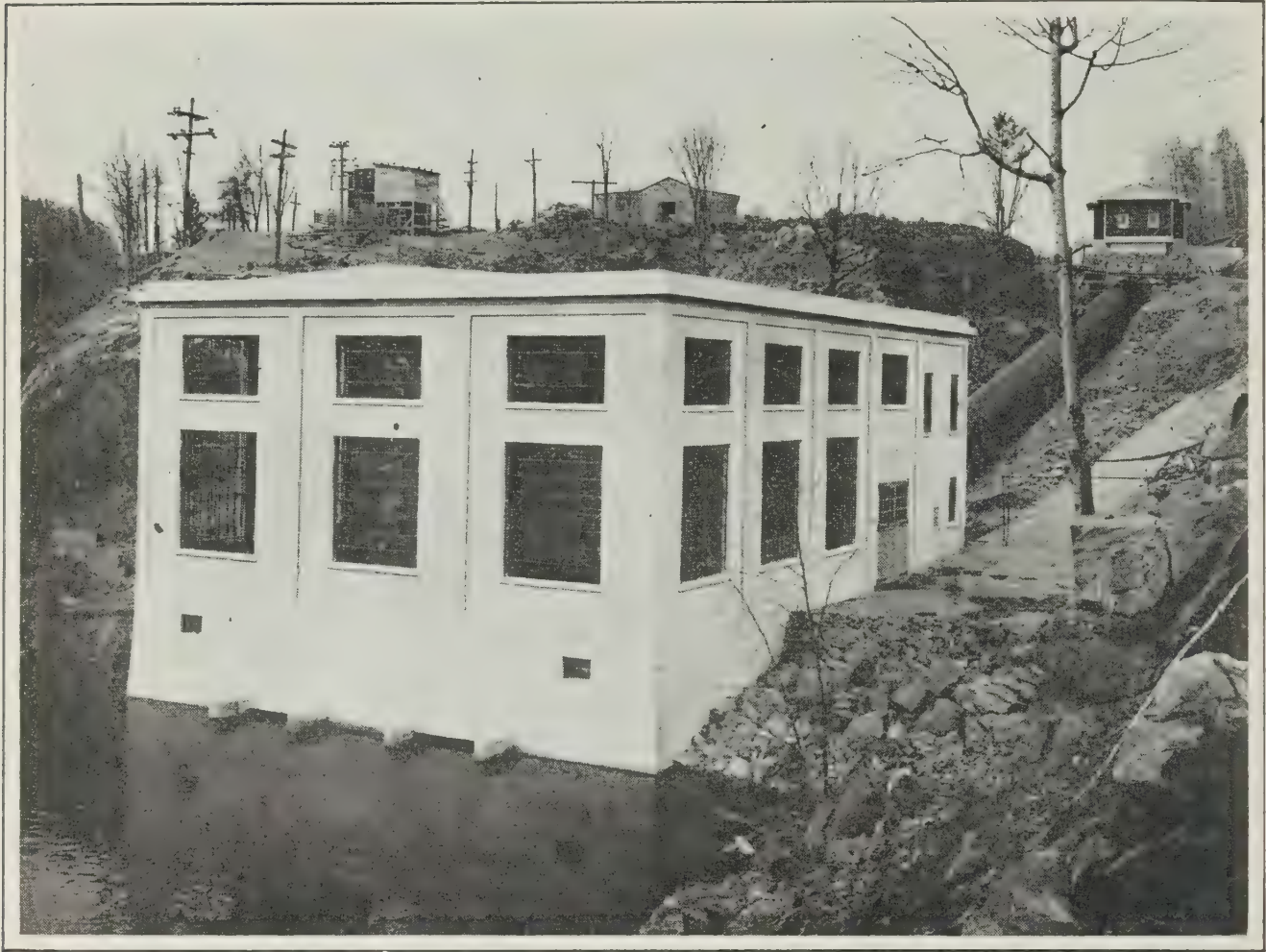
The switching equipment, "K21" Canadian General Electric oil circuit breaker, the three 250-kv-a. Pittsburg transformers and the Siemen's lightning arrester originally installed at Iroquois Transformer Station were removed to and installed in Carleton Place Distributing Station as intimated in the last Report. This station was placed in service with temporary low tension switching on May 31, 1920. The "K21" breaker was provided with an electrical shunt trip. The permanent low tension switching consisting of a three-panel switchboard, was completed in October and placed in service. This equipment is located in the generator room.

Municipal Switchboard

A two-panel, four-feeder switchboard has been installed beside the Commission's panels. This was completed and placed in service on October 24, 1920.



High Falls—General view of Generating Station, showing Control Room and Gallery.



High Fal's—General view of Generating Station, Penstock and Gate House.



High Falls—Looking down Penstock to Power House.

Smith Falls Distributing Station

Owing to increase in the load at this station, it was necessary to install a water system for cooling the 750-kv-a. transformer. A "Twinvolute" single stage centrifugal pump driven by a Wagner single-phase motor was purchased from Canadian Fairbanks-Morse Company and installed by the Commission's Construction Department, being put into service in October, 1920.

ST. LAWRENCE SYSTEM

CORNWALL TRANSFORMER STATION

Due to expected increase of load in and near Cornwall, the transformer capacity at this station will have to be increased in the near future. This will probably necessitate the extension of the building and rearrangement of the switching equipment and the installation of a second bank of transformers.

Estimates covering these changes are being made up in October, 1920.

Brockville Distributing Station

Changes in metering equipment as outlined in the last Report were completed and the new equipment put in service.

Provision was also made for synchronizing the 750-kv-a. transformers with the Brockville steam plant at the Commission's 2,300-volt bus.

Alexandria Distributing Station

In order to furnish power to the Town of Alexandria, a standard H.E.P.C. pole type station with a 300-kv-a., three-phase transformer and brick meter house is being constructed. The station is located on a lot which is the property of the town. It will be supplied with power over the 26,400-volt line from Cornwall Transformer Station. The station is designed for 44,000 volts, but will be operated at present at 26,400 volts.

The high tension switching equipment consists of line type air-break disconnecting switches with fuses purchased from the Monarch Electric Company. The transformer was supplied by the Packard Electric Company. The 4,160-volt feeder equipment was transferred from Morrisburg Station where it had been used on the Williamsburg feeder. The station will be ready for service about January 1, 1921.

Chesterville Distributing Station

A fence was installed around the lot containing this station.

IROQUOIS TRANSFORMER STATION

This station has been completely dismantled and the greater part of the equipment has been sent to Carleton Place and the balance to Toronto storehouse. The station building is being retained.

Morrisburg Distributing Station

Owing to advice from the Town of Morrisburg, that they are unable to continue the supply of power to Williamsburg, this station will be discontinued and dismantled. The panel and equipment formerly used to control the power supplied to Williamsburg is to be sent to Alexandria and installed there.

Prescott Distributing Station

The changes to the metering equipment outlined in 1919 Report were completed in February, 1920.

Toronto Paper Company Distributing Station, Cornwall

The permanent switchboard mentioned in the last Report was installed and the permanent feeder connections completed during January, 1920. Owing to a further demand for power by the Toronto Paper Company, a 1,500-kv-a., three-phase transformer has been purchased from the Canadian General Electric Company. It is expected that a second unit of the same size will be required very shortly. The building will be extended during the year to provide spacing for further transformers and switching equipment. Plans and estimates are now being made up to replace the present switching to take care of the increased capacity and additional feeders are for the Paper Company.

Owing to this sudden demand by the Toronto Paper Company for power and to the impossibility of obtaining quick delivery on the 1,500-kv-a. transformer, a 750-kv-a. transformer which has been held at Sulphide as a spare on the Central Ontario System is being installed temporarily. This will be ready for service by the first of the year.

Williamsburg Distributing Station

Owing to the Commission being unable to obtain a further supply of power from the Morrisburg Municipal Generating Station for this town, a new station was required. This is a pole type station with all the equipment placed outdoors and is to be located at the edge of the town on a lot owned by the municipality.

Delta-Star air-break switches and fuses are used on the high tension side to connect to the 26,400-volt line from Cornwall. A 50-kv-a., single-phase transformer was supplied by the Moloney Electric Company. The station is designed for 44,000 volts, the transformer being provided with a special 26,400 tap for use at the present time. Provision has been made whereby two additional similar transformers can be installed. A Lincoln demand meter is used to measure the load.

This station is expected to be in service before the end of the year at which time the supply from Morrisburg will be discontinued.

CENTRAL ONTARIO SYSTEM

AUBURN GENERATING STATION

In order to supply power to Lakefield, it was decided to run a 6,600-volt feeder, connecting it to the switch which formerly controlled the feeder to the Auburn Woollen Mills. This necessitated certain changes in the metering equipment for the woollen mills.

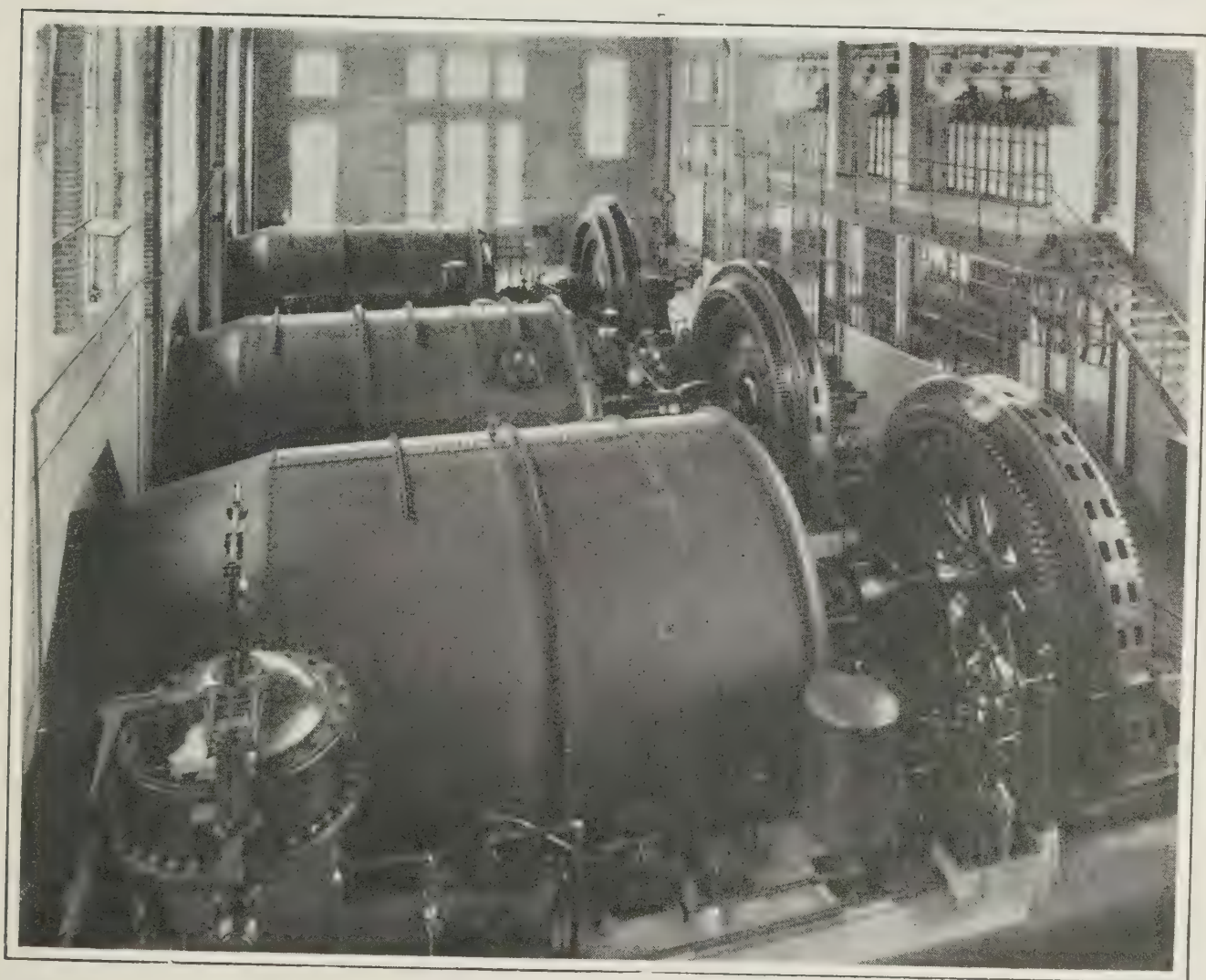
AUBURN TRANSFORMER STATION

The installation of the outdoor switching equipment for controlling the Auburn end of the Auburn-Healey Falls tie line, as mentioned in the last Report, was completed and put into service in May, 1920.

The "K10" 44,000-volt oil circuit breaker in the Transformer Station was changed from hand operation to remote electrical operation during the year.

HEALEY FALLS GENERATING STATION

The switching equipment for No. 4 outgoing 44-volt tie line to Auburn, mentioned in the last Report, was completed and placed in service with the tie line in May, 1920.



Healey Falls Generating Station from the south end.

Due to a demand for power from the Ontario Rock Company at Preneveau, a 6,600-volt feeder was installed. This was placed in service in July, 1920, with temporary connections. The permanent switching will be installed about the first of the year 1921.

Authorization has been received to ground the high tension neutral of the step-up transformers and also install relays to improve the protection on the lines and the continuity of the service. This work will be commenced at once. Grounding devices have been installed for each of the three outgoing 44,000-volt lines.

Totalizing metering is being installed for recording the total output of this station.

Views of the three water-wheels and generating units and of the control room and Low Tension switch gallery are shown in the accompanying illustration.

FENELON FALLS GENERATING STATION

Owing to the inadequacy of the lightning protective equipment at this station, provision has been made to install a set of Garton Daniel Arresters on each of the outgoing feeders.

Metering equipment was installed during the year to measure the power supplied to the Commission from the town plant.

RANNEY FALLS GENERATING STATION

Early in the year 1920 it was decided to proceed with the development of the Ranney Falls power site, with a view to having power available in the autumn of 1921. Tenders were requested and an order placed in May with the Canadian General Electric Company, covering two 4,500-kv-a 120 r.p.m. 60-cycle, three-phase, 6,600-volt vertical water-wheel generators with spring type thrust bearings, direct connected 50-k.w. exciters and all accessories including a 50-k.w. motor generator set to be used as a spare source of excitation. These units will be delivered during the summer of 1921. Design of the power-house is well advanced. This will accommodate in addition to the generators, switching equipment and transformers to handle the power from these two units and also for the power which may in the future be developed at the power sites at Dams No. 8 and No. 9.

It is expected that power from the two units will be available before the end of 1921.

SEYMOUR DAM NO. 11 GENERATING STATION—CAMPBELLFORD

Devices for grounding the 44,000-volt lines during repairs were installed in this station during the year.

Necessary changes in the relay protection to accommodate the grounding of the high tension neutral of the system have been authorized and will be started at once.

SIDNEY DAM NO. 2 GENERATING STATION

Arrangements are being made to install a set of brakes on each of two generators at the station to bring the units to rest in case of emergency. These are of an experimental nature, and if they prove satisfactory all the units will be so equipped.

Sidney Terminal Station

Instructions have been received to ground the neutral of the high tension side of the power transformers to improve the protection on the lines and equipment. Necessary changes to the relay equipment to accommodate this change have been authorized, and the entire work will be commenced at an early date.

Belleville Cement Distributing Station

The metering equipment in this station was re-arranged.

Belleville Distributing Station

One 40-kv-a. potential regulator with auxiliary equipment, which had been removed from Cobourg, was installed in this station to give better voltage regulation on the outgoing feeders.

Cobourg Distributing Station

During the year a manhole was installed on the street at the junction of street sewer and the sewer from substation and cottage.

The 40-kv-a. potential regulator with auxiliary equipment in this station was removed during the year and taken to Belleville.

Deloro Distributing Station

The condit relays on the 44,000-volt line oil switch in this station were removed to Healey Falls Generating Station and replaced by Type "B" relays.

Hydro Electric Commission's Pulp Mill Distributing Station

The necessary low-tension switching was installed temporarily for the supply of power for the construction work for the new Ranney Falls Power Development.

Lakefield Distributing Station

This station is supplied with power at 6,600 volts over a feeder from Auburn Generating Station. It is one of the H.E.P.C. standard outdoor stations, with brick meter house, adapted for 6,600 volts. Three 75-kv-a. single-phase 6,600/2,400-Volts Packard Service type transformers are installed. Owing to a fire in the local station early in the year, this station was cut into service temporarily in July. The permanent switching on the low-tension side will be complete about the end of the year.

Madoc Distributing Station

Condit relays on the 44,000-volt switch in this station were removed to Healey Falls Generating Station and replaced with Westinghouse Type "B" overload relays. Due to decrease in the demand for power by the Canadian Sulphur Ore Company it was possible to remove three 50-kv-a. service transformers. These were transferred to the Ranney Falls Development.

Marmora Distributing Station

A pole type station for three 50-kv-a., 44,000-volt single-phase transformers is being erected on the highway close to the river and directly under the 44,000-volt line. Only one transformer will be installed at the present time. The metering equipment will be placed in a meter kiosk.

The transformer is supplied by the Moloney Electric Company and the high-tension switching by the Monarch Electric Company. Provision is made for one low-tension feeder to supply the total power to the town at 2,400 volts, but the voltage will be raised to 4,160 when the three-phase equipment is installed. It is expected that this station will be ready for service before the end of the year.

Norwood Distributing Station

A standard H.E.P.C. pole type station with a 300-kv-a. three-phase transformer and brick meter house will be erected on a lot outside of the town limits along the 44,000-volt tie line between Peterboro and Healey Falls. The station is arranged so that its capacity can readily be doubled. Two low-tension feeders at 4,160 volts are being installed at the present time, one to supply Norwood and the second Havelock.

Space is provided for two additional feeders. The transformer was supplied by the Packard Electric Company and the high-tension switching by the Monarch Electric Company. It is expected that this station will be ready for service early in 1921.

Oshawa Distributing Station

The installation of the 1,500-kv-a. three-phase transformer and necessary switching, noted in the last Report, was completed and placed in service on March, 1920. The capacity of one outgoing feeder was increased, the new equipment being placed in service early in the year.

Owing to further increase in the load at the station a second 1,500-kv-a. transformer was purchased from the Canadian General Electric Company to replace one of the present 750-kv-a. units, and will be installed early in 1921. Two additional outgoing feeder equipment have been purchased from the Canadian Westinghouse Company, and these also will be installed early in 1921.

Port Hope Distributing Station

One graphic wattmeter and one current transformer were removed from this station. Devices for grounding the high-tension lines out of this station while same are under repairs were installed during the year.

Sterling Municipal Station

Arrangements are being made to install a graphic recording wattmeter to measure the power taken by this municipality.

Whitby Distributing Station

The outdoor metering equipment at the edge of the town was dismantled, and a new metering equipment to measure the power supplied to Whitby was installed in the Distributing Station.

NIPISSING SYSTEM

NIPISSING GENERATING STATION

In conjunction with the proposed remodelling of the hydraulic equipment, the necessary changes in the electrical equipment are being made.

In June a 1,400-kv-a. at 75 per cent. power factor maximum rated, 3-phase, 60-cycle, 2,300-volt., 450 r.p.m. horizontal water-wheel type generator was ordered from the Canadian Westinghouse Company. This machine will be delivered during the coming winter.

An order was given in August to the Packard Electric Company, of St. Catharines, Ontario, for three 900-kv-a. single-phase, 60-cycle, oil-insulated, water-cooled

transformers, 2,300 volts to 23,000/24,000/25,000/26,000 volts. These transformers have now been shipped and will be transported from the railroad to the power-house by water across Lake Nipissing and stored there until the generator arrives.

It is the intention to replace one old 450-kv-a. generator and the bank of three old 300-kv-a. transformers with the new apparatus.

Drawings are being prepared for the changes which will be necessary in the foundations in order to carry the new heavier apparatus.

The installation work will be undertaken in the late winter months or early summer.

French River Development

Preliminary designs were made, approximate prices of apparatus were obtained and estimates were prepared on two developments on the French River.

At Chaudiere Falls it is proposed to use four vertical type generating units of 2,800-kv-a. at 85.7 r.p.m., and at Five Mile Rapids three generating units of approximately the same rating.

Sketches and studies were made of station design and layout of equipment.

It is proposed to generate to 6,600 volts, three-phase and step up to 110,000 volts for transmission to Sudbury and other points.

THUNDER BAY SYSTEM

NIPIGON GENERATING STATION

General

In the last Annual Report a description of the complete installation proposed for this station was given and it was also mentioned that the initial installation would consist of two 10,600-kv-a. generating units, one bank of three 8,000-kv-a. transformers with spare and equipment for one 110,000-volt outgoing line.

Switching and Protective Equipment

On December 12, 1919, an order was placed with the Canadian General Electric Company for the 110,000-volt lightning arrester required for this station.

In February tenders were requested on a storage battery, a motor generator set for charging the battery, and the switchboard equipment. The order for the storage battery was awarded to the Canadian Hart Accumulator Company on May 15; the order for the motor generator sent to the Canadian Crocker Wheeler Company on July 8th; the order for Weston Instruments to A. H. Winter Joyner, Limited, on March 15th; and the order for the switchboard to Canadian Westinghouse Company on March 19th.

In April tenders were received on the 12,000-volt disconnecting switches, bus supports and floor and wall bushings. On May 26th the order was placed with the Canadian Westinghouse Company for the disconnecting switches and bus supports, while the floor and wall bushings were ordered from the Electrical Development and Machine Company of Philadelphia, on June 26th.

On June 30th the 12,000-volt current and potential transformers which are required and which were not included in the generator contract were ordered from the Canadian Westinghouse Company.

All of the switching and protective apparatus will be installed by the Construction Department of the Commission.

Mechanical Equipment

The 75-ton and the 10-ton cranes referred to in last Report have been delivered and the 75-ton crane in the generator room was put into operation in October, while the 10-ton crane in the gate-house will probably be erected in December. On July 5th, after tenders had been obtained from several manufacturers the order for the 45-ton transformer truck was given to Northern Crane Works, Walkerville. The filtering equipment for the lubricating oil for the generator bearings was ordered from Richardson Phoenix Company of Milwaukee, Wisconsin, on July 27th. The filter for the transformer oil was ordered from the Canadian Westinghouse Company on May 10th.

In August two 250-gallon water pumps for supplying cooling water for the transformers and for the generator bearings, also two 75-gallon oil pumps for circulating the oil through the generator bearings were ordered from the Turbine Equipment Company, Toronto. Two transformer oil tanks, and one lubricating oil tank were ordered from the Canadian Allis Chalmers Company on August 26th. A three-ton hand operated hoist for lifting the 12,000-volt oil circuit breakers was ordered from Herbert Morris Crane & Hoist Company on October 7th.

Transformers

For the station service three 250-kv-a. 13,200-volts high-tension, 2,300 and 575-volt single-phase self-cooled transformers were ordered from the Packard Electric Company on March 22nd.

Building

As noted in the last Report the building is to be concrete with steel framework, and is being erected by the Construction Department of the Commission, also the structure steel is being supplied by McGregor & McIntyre, Limited, of Toronto. The steel sash required was ordered from the Trussed Concrete Steel Company on July 16th. The passenger elevator was ordered from Turnbull Elevator Company on August 6th. Steel details such as stairs and ladders were ordered from Toronto Steel Construction Company on September 20th.

Progress of Work

In August it was found that by careful planning, power could be supplied to the City of Port Arthur by December 20, 1920, on which date the present contract for power for this city expired. To do this it will be necessary to have one or both of the generators ready for service, but the transformers and switching equipment must be installed temporarily on the generator floor. In this temporary installation, the drawings for which are nearly completed, two transformers will be used, being connected open delta and supplying power to the high-tension lines at 63,500 volts.

Two tanks for the 8,000-kv-a. transformers were shipped from Canadian General Electric Company's factory at Peterboro on October 26th, and the transformers themselves will go forward in November. It is expected that the remaining two transformers will be shipped during December.

Shipment of the generator parts was commenced in May. The Canadian Westinghouse Company are sending their men to the station in October to begin the erection of the two generators.

The steel for the generator room has been erected.

On account of weather conditions it will not be possible to pour the concrete walls of the generator room, and therefore arrangements have been made to run up the forms for these walls to the full height, and by covering outside with paper and an extra wood sheeting provide housing for the generator and other equipment during the winter months. A temporary wood roof has been placed.

The three 250-kv-a. transformers were shipped by the Packard Electric Company in September and will be temporarily connected up on the generator floor to provide power for cranes and station service.

The low-tension oil circuit breakers referred to in last report have been delivered at Nipigon Station, and the high-tension breakers will be shipped during the month of November.

During November the switching apparatus required for the temporary installation will be shipped to the station, and will be installed as soon as delivered.

PORT ARTHUR (NIPIGON) TRANSFORMER STATION

As the future requirements at this station could not be estimated it was decided in June that a temporary station should be erected near the Port Arthur Pumping Station. The equipment to be installed will be as described in last Report, except that switching apparatus for only two feeders, instead of four, will be installed at present. In October it was arranged to have the two 22,000-volt feeder breakers, arresters and switchboard panels placed in the pumping station.

Drawings of the building were completed early in September, and it is expected that the building will be completed by November 1st. The building is approximately 67 by 40 by 30 feet high, inside dimensions, and is of wood frame construction, the walls being of wood sheeting with "gunite" on the outside.

Electrical layout drawings were completed in October, and it is expected that the station will be ready for operation by December 20th.

As noted in last Report four 4,000-kv-a. transformers were ordered from Canadian General Electric Company. These transformers will be shipped, two in November and two in December. The 110,000-volt oil circuit breaker is a Westinghouse type "GA" which was removed from the Dundas Transformer Station, and which has been rebuilt by the Canadian Westinghouse Company. Three 46,000-volt, type "GA-3" oil circuit breakers for the station service and for the 22,000-volt feeders were ordered from the Canadian Westinghouse Company, being shipped from stock. The 110,000-volt lightning arrester was ordered from the Canadian General Electric Company on December 12, 1919. The 110,000-volt insulators were ordered from Ohio Brass Company, Mansfield, Ohio, in December, 1919. The station service transformer, which will be 75-kv-a., 3-phase, 22,000-volts, high-tension, 2,300 volts and 575 volts low-tension, has been ordered from the Canadian General Electric Company, and will be supplied from stock. The pump to supply cooling water for the transformers was ordered from the Canadian Allis Chalmers in September. The graphic wattmeters and graphic voltmeters are being supplied by the Canadian Westinghouse Company, while the indicating instruments will be "Weston" type, supplied by A. H. Winter-Joyner, Limited.

All work at this station is being carried out by the Commission's Construction Department.

SECTION V

POWER CONSTRUCTION

POWER AND STORAGE

General

The Commission has during the past year prosecuted energetically all work in connection with the various enterprises under consideration. The power shortage covering as it has, the whole Province, made it necessary that the various works be carried on with the utmost energy. The investigations on the St. Lawrence and Trent Rivers have been continued throughout the year and in addition storage surveys have been made on several of the smaller rivers. The Commission has advised, upon request, the various municipalities regarding problems arising from time to time in connection with their administration and work.

POWER CONSTRUCTION

Nipigon Development

Work has progressed rapidly on the installation at Cameron's Falls, every effort having been made to supply the pressing needs of Port Arthur and Fort William, for power, as soon as possible.

The tail race which is about 1,000 feet in length necessitated excavation to the extent of 122,000 cu. yds. of earth and 57,000 cu. yds. of rock. Rip rap has been placed to the extent of 2,100 cu. yds. This work was carried out by means of a cofferdam which cut off the river flow thereby permitting the work to be done in the dry.

The forebay excavation necessitated the removal of about 20,000 cu. yds. of material, including wing walls, mostly rock. Concrete was poured on the wing walls to the amount of 6,000 cu. yds., and about 3,000 cu. yds. of rock fill and puddle was placed in connection with same.

The necessity of completing the whole substructure of the power house for six units entailed considerable work that was not essential in itself for the operation of the first two units. Some 34,000 cu. yds. of rock were removed from the power house site and concrete was poured for the substructure, to the amount of 28,000 cu. yds. In order that the plant might be put in immediate operation the steel for the superstructure of the power house was erected and temporarily sheeted in. This enabled the turbine and generator erection to be rushed to completion and No. 2 Unit was placed in commercial operation on the night of December 20th, 1920, which was the scheduled date for the delivery of power to Port Arthur.

As it was not considered possible to complete the main dam by this date a substantial cofferdam was placed, sheeted and puddled, and the water allowed to flow over the top. While this did not give the total available head it permits of satisfactory operation until the spring when construction will be started on the concrete dam.

The water having been raised some 29 feet above the former level of Lake Jessie made it necessary to clear the land up to the 745 contour on both sides of the river above the plant up as far as Pine Portage. To date some 500 acres of this land have been cleared.

The Nipigon River being known the world over for its fishing necessitated the installation of a good type of fishway which would permit the fish to pass easily up and down the river and enable them to overcome the 72-foot drop at the plant. After much study a satisfactory type was designed.

The present installation consists of two 12,500 horse-power vertical single runner turbines operating under 72-foot head at 120 r.p.m., manufactured by the I. P. Morris Company, of Philadelphia. They are set in reinforced concrete scroll cases and drive 60-cycle generators supplied by the Canadian Westinghouse. It is expected that the Commission will shortly increase the capacity of the installation.

High Falls Development

During the past year the High Falls Development on the Mississippi River was completed and placed in operation. No. 1 Unit was placed on the load on May 1st and Nos. 2 and 3 on June 26th, 1920.

Though the construction force put forth its best efforts on this work the labour situation at all times left much to be desired. It was practically impossible to maintain the force at full strength at any time during the construction period. For a period of two months the job was held up by a strike, a result of demands for higher wages from common labour, at a time when delay meant much loss of time and money. Owing to high costs and delays caused by labour conditions it was almost impossible to obtain the necessary materials and supplies, though these were ordered well in advance of requirements. Construction work was at times greatly held up by failure of power from Merrickville. Time after time, just when the pumps had cleared the power house site of water the supply of power would fail resulting in much work to be repeated. On February 10th, 1920, this supply of power gave out altogether and it was necessary to install steam pumps to do the work. The force was also greatly depleted by an influenza epidemic which visited the camp, making it impossible to secure men. The plant, however, was rushed to completion on scheduled time.

The installation consists of three 1,200 horse-power turbines of horizontal setting, cylindrical casing, double discharge type, operating under 85-foot head at a speed of 300 r.p.m. This plant supplies power to the Rideau System of the Commission.

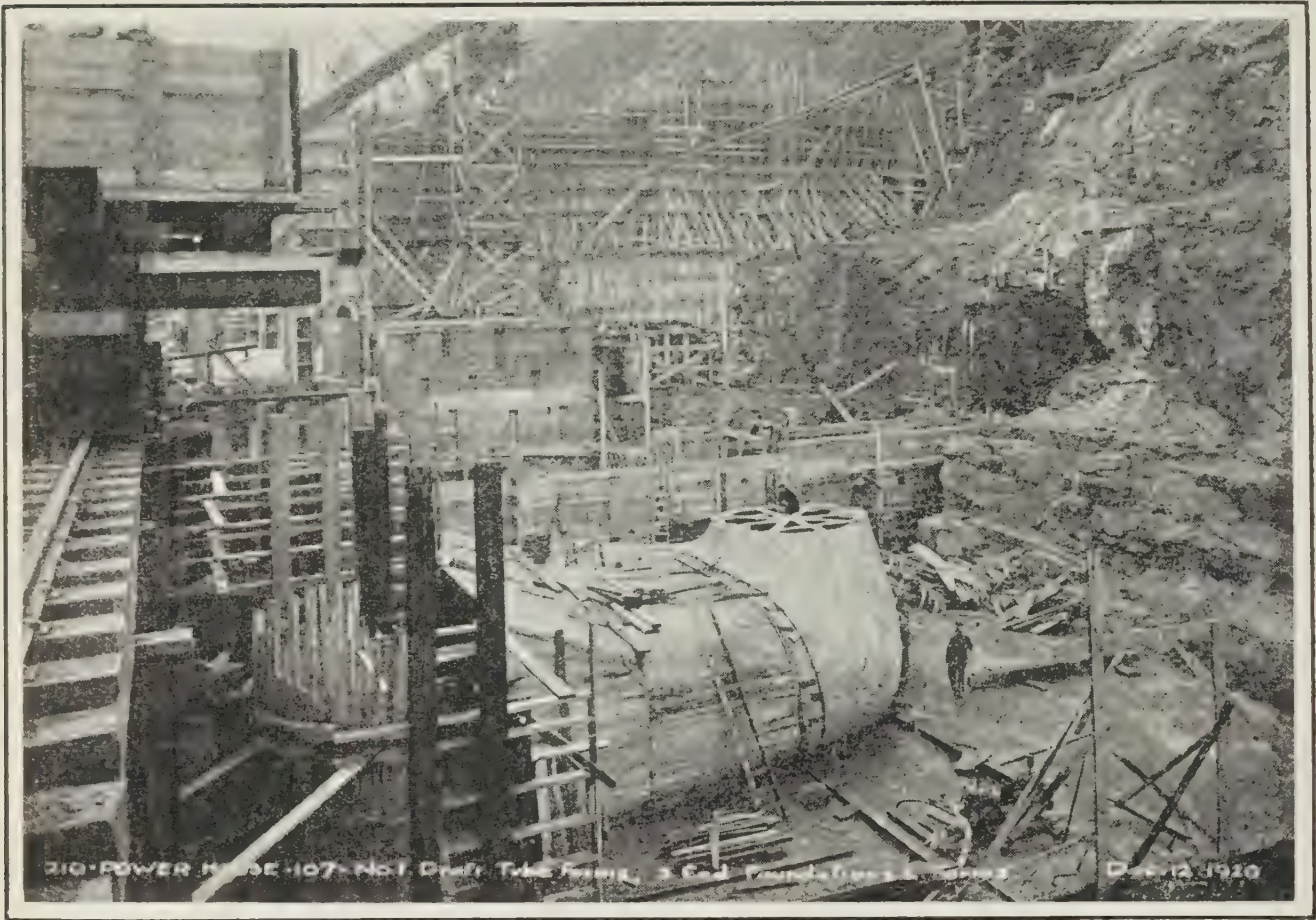
The excavation in connection with the development amounted to about 7,000 cu. yds. of earth and 7,000 cu. yds. of rock. Concrete was placed in dam, gate house and power house substructure to the amount of 5,800 cu. yds.

Ranney's Falls

Due to the increased demand on the Central Ontario System the Commission decided during the year to go ahead with the development at Ranney's Falls at Lock No. 10 of the Trent Valley Canal System.

Water will be drawn from sluiceways provided by the Department of Railways and Canals, in the canal walls directly into the forebay. From here it will be conducted in reinforced concrete penstocks to the turbines which will be set in concrete scroll cases.

The turbines, two in number, are of the single runner vertical type, developing 5,000 horse-power under a head of 47 feet when operating at a speed of 120 r.p.m. The tailrace is some 300 feet in length and discharges directly into the lower river.



To date some 5,300 cu. yds. of rock have been removed from the forebay, 4,700 cu. yds. from the power house site, and 5,500 cu. yds. from the tail race. The construction railway into the plant has been completed and work is proceeding on the permanent roadway.

St. Lawrence River Survey

The investigations for power development on the St. Lawrence River have been carried forward as outlined in last year's report. Field parties have been engaged in locating contours on both sides of the river from the head of the Galops Rapids to the foot of the Long Sault. Artificial features are being tied into the various contours. Metering parties have established sections at various places throughout the vicinity and automatic gauges have been installed.

The field work has been completed and the staff is now engaged in plotting the notes and compiling hydraulic data which has been collected. Advance estimates of development have been made for various layouts for information purposes.

Niagara Development

The office and field staff have energetically pushed all work in connection with the development at Niagara throughout the past year and unless something unforeseen occurs the largest of all Hydro-Electric Developments will be operating before another year has passed.

Work on the intake section is well in hand. The dredge *Boone* has been in continuous operation throughout the year, excavating material for the intake and ship channel. Pile driving by means of derrick and scow has been proceeding with the result that the intake cofferdam is well on the way to completion. A Beatty hoist and derrick scow are clamming material for the intake cofferdam.

Arrangements have been made with the Toronto Harbour Commission to secure the large suction dredge *Cyclone* which will be operated on the river section. The Lidgerwood cableway has been in continuous operation throughout the year and has made good progress toward completion of deepening this portion of the river. During the year good progress was made on the canal excavation, there having been removed from the start of the job to date 6,327,000 cu. yds. of earth and 1,980,000 cu. yds. of rock. As outlined in last year's Report, many bridges, both highway and railroad, have been built and work is progressing satisfactorily on the others. Placing the concrete lining in canal is now in progress. This is being done by means of first concreting two strips of canal floor. Rails are then laid on this and movable towers holding forms for the walls are moved along section by section.

The tunnels for penstocks and ice chute have been driven through the cliff and work is now proceeding on the penstock trenches.

The power house excavation has been completed for the first two main units and ice chute. It is the intention to proceed rapidly with the completion of this part of the work in order that these two units may be ready for delivery of power by the fall of 1921. The installation of the other three units may then be proceeded with. The job as a whole is proceeding according to schedule.

STORAGE

Trent River

As information accumulated from various sources and was analyzed for value, it soon became evident that the general enquiry into the Trent River storage would have to be carried out under the following heads:—

(a) The determination of the greatest minimum mean daily discharge per month at either Peterborough or Healy Falls with the present storage, due allowance being paid to river driving operations and canal levels.

Precipitation, temperature, discharge and lake levels records have been procured for the last ten years and are in process of being worked up to determine this flow. The preliminary step was the determination of the probable natural discharge.

(b) The determination of the greatest minimum mean daily discharge per month with possible increased storage.

This information is being worked up and drawings and estimates made of storage schemes, the cost of same being computed on a basis of "Horse-power Year Per Annum" and with reference to the power sites on the river, both developed and undeveloped.

Considerable time was given this year to the Central Ontario System of the Commission in the study of the economical use of the existing river discharge at the generating stations to the end of gaining the maximum output, and having consideration to the capacities of the generating stations in use and the limitations imposed by the officials of the Department of Railways and Canals.

Storage Dams on South River

The Hydro-Electric Power Commission of Ontario have found it necessary to improve the flow of the South River, on which is situated the Nipissing Power Plant, in order to meet the growing demand from the town of North Bay and surrounding district.

This plant was acquired, when the Commission took over the Electric Power Company, along with the series of plants, owned and controlled by them on the Trent and Severn Rivers.

Though the plant is small in capacity it will probably be of interest to note the manner in which the improvements are being carried out.

Storage

The South River being a small stream, it has been found necessary, in the past, to make use of a steam auxiliary during the summer months and winter months when the flow of the river is low. It has been found necessary, however, because of the scarcity of fuel and the uncertainty of delivery to build storage dams on the upper reaches of the river to conserve the water.

These storage dams are at the outlets of small lakes ranging in surface area from 100 to 1,000 acres. The dams are of timber crib, rock fill construction, sheeted on the face and puddled with a single sluiceway containing stop logs, to permit of regulating the off-flow. (See photographs.) The dams are eight in number, the greatest height being in the neighbourhood of 20 feet. The storage heads range from about 2 feet to 14 feet on one of the lakes and the total storage impounded is in the neighbourhood of 26,000 acre feet. It is expected that with the storage, there will be obtainable 1,500 horse-power continuous with a plant efficiency of 80 per cent., and on this basis 2,200 horse-power with an annual load factor of 70 per cent.

Reconstruction

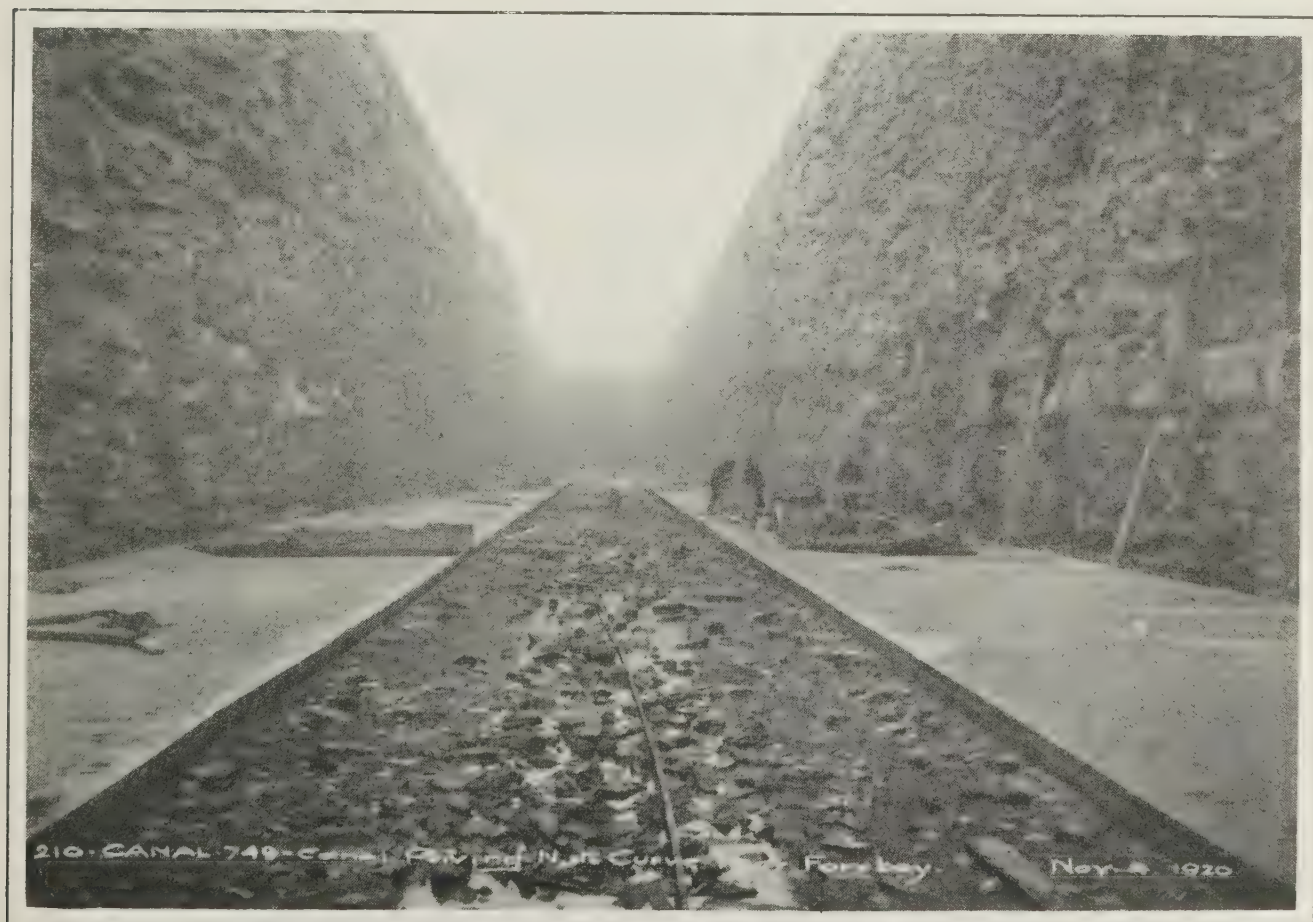
The turbines in the plant being rather antiquated are very low in efficiency and this is being rectified as set out below.

New runners have been designed for the old casings which will develop 1,400 B.H.P. each in place of 1,000 B.H.P. developed by the old runners. New seal rings will be put in and the connection between the guide vanes and the governor which at present is very light made more substantial. In addition to this, two new butterfly valves will be placed in the power house instead of the old gate valves, and some time in the near future a new wood stave pipe will be installed in place of the old one. New electrical equipment is also being installed, as well as a new shaft.

It is expected that these changes with the increased flow will take care of the demand for some time to come.

Seguin River

The Commission has decided upon request of the Municipality of Parry Sound to make a survey of the storage possibilities on the Seguin River watershed. This will be in the nature of reconnaissance work and will embrace a complete report of improving the flow of the river by the building of storage dams, etc., on the upper lakes.



SECTION VI

MUNICIPAL WORK

NIAGARA SYSTEM

GENERAL

Increase in power demands of municipalities on the Niagara System during the year made it necessary to limit the supply to each municipality, and at times of ice trouble at the generating stations during the early spring further reductions in loads were necessary for short periods. Arrangements are being made for an additional supply of power early in the coming year. Considerable assistance was given to the municipality by the engineers of this Commission in the adjustment of loads on local systems so that the best use could be made of the limited power supply.

The operating conditions of each municipal system during 1919 were analyzed for the purpose of investigating the suitability of rates and to ascertain the actual cost of supplying street lighting and municipal power, so that any surplus could be refunded by the local system to the general fund of the municipality.

General engineering assistance was given in connection with the operation of systems in the following municipalities:

Ayr, Baden, Bolton, Burgessville, Clinton, Dashwood, Delaware, Delora, Drayton, Drumbo, Dutton, Exeter, Galt, Goderich, Granton, Harrison, Hensall, Hespeler, Ingersoll, Lambeth, London, Lynden, Milverton, Mitchell, Moorefield, Mount Brydges, Norwich, Otterville, Paris, Plattsville, Port Credit, Port Stanley, Preston, Princeton, Rockwood, Rodney, St. Catharines, St. Jacobs, St. Mary's, Seaforth, Simcoe, Springfield, Strathroy, Stratford, Tavistock, Thamesford, Thorndale, Waterdown, Waterford, Welland, Weston, Woodbridge, Zurich.

SPECIAL

Special engineering assistance was given in the following municipalities:

Acton

Engineering advice was given with regard to the extension of distribution system south of the village to serve municipal waterworks pumps.

Ailsa Craig

During the year the voltage of the power supply was changed from 4,000 volts to 13,200 volts, this change being necessitated on account of the line being extended to serve Parkhill. The line was originally constructed for the latter voltage so that no additional line expense was necessary on the line already constructed.

Aylmer

During the year assistance was given to the local management in connection with extensions to the system and also *re* operation of the local system.

Beachville

Assistance *re* the billing of all power consumers and the looking after the operation of the system throughout the year was given to the local management.

It is expected that the coming year will see additional power load taken by the three line companies necessitating the increasing of the capacity of our Beachville substation which now has a normal capacity of 225-kv-a.

Blenheim

Arrangements were made for the flour mill to operate on Hydro power as soon as the present power shortage is relieved. This will mean a large increase in the load of the municipality.

Brampton

Assistance was given the municipality respecting negotiations for a continued supply of power to customers in Huttonville. Engineering advice was also given with regard to the distribution system in the town.

Brantford

Engineering assistance was given in connection with taking over by the city the distribution system of the Parkdale District, a section of Brantford Township which was annexed by the city on January 1st.

Brigden

The Brigden Brick & Tile plant installed electric motors throughout their plant and turned on Hydro power, using approximately 50 horse-power, power to be supplied to customer only when available until the present power shortage is relieved.

Chatham

A valuation was made of the distribution system of the Chatham Gas Company by engineers of the Commission, and the Chatham Hydro-Electric System purchased this property by agreement. A portion of this system was left 60-cycle to supply those consumers having 60-cycle motors. The 60-cycle power is supplied by the operation of gas engines and 60-cycle generators in the Chatham Gas Company's power house.

A one-storey brick addition was made to the office building and sub-station, and capacity of the station increased by 1,750-kv-a. three-phase transformer. A 400 horse-power synchronous motor generator set was installed to correct the power factor, and this set will supply the 60-cycle system when additional power can be supplied by the Commission.

Chippawa

Engineering assistance was given in connection with the raising of additional debentures to capitalize the cost of the system.

Comber

Engineering assistance was supplied and arrangements completed to supply additional power customers. A large part of the load is to be summer power.

Dorchester

Assistance was given to the local management *re* extensions to several small power customers, and control switch was installed on this load.

General assistance was given from time to time *re* matters pertaining to the operation of the system.

Dublin

In order to capitalize the cost of additions to the distribution system, it was decided to issue additional debentures. An engineer's statement was prepared and forwarded to the Township of Hibbert, together with the approval of the Commission in order that application could be made to the Railway and Municipal Board for \$1,200.

Elmira

During the year a new office was acquired and equipped for the sale of electrical appliances for the benefit of the users of Hydro current in the village. This arrangement has proved to be highly beneficial not only from the appliance standpoint but in providing a proper centrally located office for the payment of accounts, etc. Assistance has also been rendered to the municipality in arranging their system for the additional load required by the Elmira Rubber Co.

Embro

Engineering assistance was given to the municipality *re* a proposed extension to take care of a small flour and chopping mill at times of low water which is now the owner's source of power.

General assistance in the operation and maintenance of the local system was also given throughout the year.

Exeter

Waterworks Pumping

A layout was made and the installation is now complete in the present station of an electric unit for domestic service automatically operated, comprising a 225-gallon per minute Roturbo pump coupled direct to a 20 horse-power Westinghouse motor for 3-phase, 25-cycle, 550-volt current, located in a pit in order to avoid priming requirements, with Cutler Hammer automatic starter and time clock, allowing of operation during three periods each day, and with automatic pressure regulator and switch for starting and stopping the unit at predetermined water levels in the stand-pipe. The equipment was supplied under contract with Messrs. Goldie & McCulloch at a cost of \$2,082.

Georgetown

Engineering assistance was given the municipality with regard to various matters relating to the distribution system, including the supply of power for a waterworks system.

Glencoe

A 4,000-volt line was constructed from Bothwell to Glencoe to supply the municipality and the street lighting and distribution system remodelled by the Commission. Power was first supplied early in August.

Guelph

Waterworks Pumping

The equipment described in the previous report and covering two domestic electric pumps and one booster for fire service, has now been installed and is in operation, and the assembly of special piping, concrete work of considerable intricacy and maintenance of satisfactory water supply during construction have been carried out by the operating staff of the pumping station in a very creditable manner.

Hamilton

Engineering assistance was given in connection with taking into the city system part of Barton Township system located in district absorbed by the city.

Kitchener

Due to the ever-increasing demands for power in this city, it has been necessary to proceed with the erection of a new sub-station to take care of the power load in the factory district. This station will relieve the main station of approximately 2,000 horse-power and better service can be maintained. Various changes are under consideration, due to the increasing demands in this district. It is expected that considerable increase will be necessary in the high-tension station as well as the local station as soon as additional power is available.

Leamington

Waterworks Pumping

A report has been made with preliminary layout and estimates for one 450-gallon and one 215-gallon electric pumping units for domestic service to be installed in the present pumping station.

Lucan

Assistance was given the local commission during the year in connection with the operation of the system and in making extensions to supply power to the flax mill and chopping mill.

Markham

As the municipality on March 17th, 1919, signed a contract with the Commission for the supply of electric power, and as they were urgently in need of such supply an extension was made from the Scarboro Township system to Markham to furnish a limited amount of power at 4,000 volts. Assistance was given in the remodelling of local distribution system and power was delivered on April 1st.

Merritton

This municipality was formerly supplied with power from the Ontario Power Company, but during the year this contract expired and a contract was made with this Commission for power. Merritton will become a Hydro municipality about the first of the coming year.

Mimico

The phenomenal growth in population of this municipality necessitated alterations in the local distribution lines, and engineering assistance was given looking to betterments to the system. Owing to the extreme power shortage and the consequent limited service that could be given these betterments were reduced to the immediate needs with the idea of further alterations later.

Milton

A number of applications for power were received and arrangements were made for supplying a limited amount during summer months. Assistance was given by the municipal department in arranging for the new loads.

New Toronto

Strong demands were made for considerable additional power by existing customers, which demands could only be met to a very limited extent. Assistance was given the municipality in looking after the local business.

Newbury

Estimates of the cost of supplying power to the municipality and of the cost of a distribution system were furnished by the Commission. Hydro, enabling and money by-laws were voted on in September. A distribution system will be built early in the spring of 1921.

New Hamburg

In order to better the service to the lighting customers some changes were recommended in the distribution system. A rearrangement of the transformers and an increase in the secondary wiring has been made necessary by additional range load, etc.

Niagara Falls

Engineering assistance was given with a view to building a new sub-station to take care of future requirements and to improve the operating features. Also additional debentures were sold to purchase a new transformer to take care of additional loads expected in 1921.

Waterworks Pumping

The 1,740-gallon electric pumping unit detailed in the previous report has been installed. This work is complete.

Niagara-on-the-Lake

Equipment was installed in the sub-station with a view of improving the voltage in that municipality. A report was also made with a view of reconstructing part of their distribution system.

Waterworks Pumping

The new gasoline-driven unit for fire service was described in the previous report. Owing to a series of labour disturbances in the contractor's foundry, shipment is only now being made, and the plant will not be ready for operation before the end of the year.

Parkhill

During the year the distribution system was installed to meet the requirements of the municipality. Power was first delivered in the month of May. Assistance was given during the year in extending lines to serve new customers. It is expected that the coming year will see electric power delivered to a number of additional power customers.

Port Colborne

On March 1st Port Colborne purchased from the O.P. Company the distribution system and signed a contract for power with the Commission, and are now operating as a Hydro municipality. Assistance was given in operating system during the year.

Port Dalhousie

Engineering assistance was given in connection with issuing additional debentures required to pay outstanding accounts and to meet the cost of extensions required in connection with the system.

St. Thomas

Engineering assistance was given to the local Commission *re* extensions to take care of the additional waterworks load and other power loads to be supplied when power supply permits. Arrangements were made for erection of a storage building, estimated cost of which is \$9,000.

Sarnia

Assistance was given by the Commission in the purchase of a building on the main street, this building to be remodelled and used as an office building. This building will be ready for use about December, 1920.

Thamesville

Arrangements were completed to supply power to a flour mill to operate during off peak hours.

Tilbury

The large tile plant which was burned down early in the year and which was electrically equipped was rebuilt and is again operating with Hydro power. Power was also supplied to the small planing mill, and arrangements completed for the installation of 45 horse-power in the Auto Top Factory as soon as power shortage conditions are relieved.

Wardsville

Estimates of the cost of power and of a distribution system were furnished by the Commission. Hydro, enabling and money by-laws were submitted to the rate-payers in October. Power will be supplied early in 1921.

Waterloo

In order to take care of expected loads and to supply better service new station equipment was necessary. An additional station to house three 750-kv-a. 3-phase transformers with modern protective apparatus is being built and will be completed by the first of the year 1921.

West Lorne

From time to time general assistance was given to West Lorne *re* the operation and maintenance of the local system.

It is expected that the coming year will show a considerable reduction in the rate to the municipality and to the local consumers, as the load will increase considerably when additional power is available to supply new loads.

Windsor

The steam plant and distribution system of the Sandwich, Windsor and Amherstburg Railway were valued by engineers of the Commission and the property purchased by Windsor in the month of April. Windsor continued to operate this system as formerly with power supplied from the steam plant as Niagara power was not available.

Waterworks Pumping

The equipment described in previous reports has been installed and is now in operation. Considerable difficulty was experienced from water-soaked soil and interference from pipes and connections forming part of the steam pumping plant, which were in bad condition, but had to be retained during construction, to avoid interruption of service to the city. The steam pumps now have ample and direct connections to the new suction wells, and the interior walls of the station have been opened up, so that the operator may have a comprehensive view of both steam and electric plants. The re-arrangement of discharge mains in the vicinity of the station and the installation of the Venturi meter are also practically completed.

RURAL

The question of supplying power to rural districts has received a great deal of attention during the year, and complete surveys have been made of a large number of townships to obtain data required to put into operation the district scheme of distributing Hydro power to rural districts. The legislation authorizing this method of supplying rural districts was recently obtained, and it is expected that with the co-operation of the farmers interested, a large number of rural lines will be constructed during the coming year.

GENERAL

(a) During the year, general engineering assistance was given the following townships:

Albion, Chatham, Dorchester South, Esquesing, Howard, Orford, Nassagaweya, Puslinch, Toronto, Barton, Dereham, Dover West, Harwich, King, Markham, Norwich North and South, Raleigh.

SPECIAL

(b) During the year special engineering assistance was given to the following townships:

Brantford Township

A valuation was made of the Parkdale section, which was recently annexed by the City of Brantford, with a view of having it incorporated in the city's system.

Etobicoke Township

Numerous applications for electric power and lighting service were received from residents of the township and estimates were made and rates approved covering such service preparatory to the time when sufficient power could be obtained to warrant the building of extensions to serve the new customers.

York Township

During the year, estimates covering numerous extensions to the distribution system were checked and approved preparatory to building so soon as sufficient power is available. Statements were also prepared of the cost of the existing distribution system and all preparations made for the transfer of the system to the ownership of the township.

Scarboro Township

The demand for both power and lighting service greatly increased, and assistance was given the municipality in altering and extending the system. The natural expansion, however, was considerably curtailed owing to the power shortage.

Stamford Township

Engineering assistance was given in connection with building a new sub-station to take care of their present and future requirements, also, with a view of locating the sub-station nearer their present load centre.

West Flamboro Township

During the year, 2,200-volt line was built from Bullock's Corners to Christie's Corners to serve twenty-five farmers and hamlet users. This line is expected to be in operation early in January, 1921.

(c) Rural surveys have been made in the following townships, and estimates prepared to determine the cost of supplying power to many districts in these townships. It is proposed to hold meetings in a number of these townships early in the coming year to explain the manner in which power requirements will be met and the cost of same:

Ancaster, Barton, Beverley, Blandford, Blanshard, Brantford, Burford, Crowland, Dorchester North, Downie, Flamboro East and West, Grantham, Louth, Nelson, Niagara, Nissouri East, Oakland, Oxford North, East and West, Pelham, Saltfleet, Stamford, Thorold, Townsend, Trafalgar, Waterloo, Zorra East.

ESSEX COUNTY SYSTEM

The Essex County System is operated by the Commission with an office at Leamington, and the financial standing of the system shows considerable improvement over the previous year, and it is expected that a number of important additional loads will be secured as soon as sufficient power is available on the Niagara System.

SEVERN SYSTEM

GENERAL

Assistance was given by the Commission to the various municipalities on the system in the nature of engineering advice covering matters pertaining to the general operations of the various local Distributing Systems.

An analysis of the operating statement in the various municipalities was also made for the purpose of determining equitable rates for each class of service as well as to ascertain the amount of refund above cost due each corporation for energy supplied for public service. The various towns for which this assistance was rendered are as follows: Alliston, Barrie, Beeton, Bradford, Coldwater, Collingwood, Cookstown, Creemore, Elmvale, Midland, Penetang, Port McNicoll, Stayner, Thornton, Tottenham, Victoria Harbor and Waubesaushene.

Assistance was also given to the following towns in connection with the preparation of money by-laws and the obtaining of approval of same from the Ontario Railway and Municipal Board to cover the capital cost of extensions and improvements to the Local Distribution System over and above the first cost as covered by the original money by-laws: Alliston, Cookstown, Thornton, and Port McNicoll.

Barrie

Assistance was given the local officials in connection with executing an agreement and constructing an extension to the Local Distribution System for the purpose of serving the Grand Trunk terminal and shops at the Company's divisional point at Allandale. The approval of the Commission was requested and obtained covering the use of surplus funds for the purpose of constructing an addition to the office building of the Local Hydro Utility to provide for more adequate quarters for the staff and more suitable space for the sale of appliances.

Camp Borden

A new agreement was prepared and executed with the Air Board of Canada covering service at the Aviation Camp at Camp Borden and providing for the assuming of all of the obligations of the existing agreement with the Department of Militia and Defence.

Midland

Assistance was given the local officials in connection with executing an agreement with the Grand Trunk Railway for the Grand Trunk Pacific elevator at Midland, and an investigation was made covering extensions to the local system and the construction of a sub-station for this purpose and estimates and rates were prepared accordingly. Arrangements are being made for serving two addi-

tional terminal elevators now "steam" operated, and also for a thousand-barrel flour mill now under construction. It is anticipated that by the close of 1921 the demand for power in this municipality will have increased by approximately 200 per cent.

Port McNicoll

Due to the existence of a large sub-station serving the C.P.R. elevator and terminal at this village, arrangements were made during the year for dismantling the local sub-station and serving the village from the C.P.R. sub-station. An investigation was made covering the saving involved by this method and estimates were prepared and submitted to the municipality accordingly. Assistance was given the local officials in connection with the preparation of a money by-law to cover the cost of constructing a tie line between the C.P.R. sub-station and the village and all arrangements made for making the change as mentioned above early in the coming year.

RURAL

Petitions having been received from prospective customers in a number of different townships located in the district served by the Severn System, complete investigations and surveys were made in these townships for the purpose of ascertaining the possibility of serving all customers located within the boundaries of each, under a uniform rate irrespective of the small sections covered by special petitions. Estimates and rates were prepared based on such surveys and investigations and distributing systems were designed covering rural service to each and every farm in each respective township. This work was performed in the following: Innisfil, Tecumseh, West Gwillimbury and parts of Flos, Nottawasaga and Tay Townships.

EUGENIA SYSTEM

GENERAL

An analysis of the operating statements of the various municipalities was prepared for determining rates for the coming year as well as for the purpose of determining the amount of refund due each corporation from its local Hydro System for energy supplied for public service.

Assistance was given to the following municipalities in the nature of engineering advice pertaining to the general operation of the local system: Arthur, Chatsworth, Chesley, Dundalk, Durham, Elmwood, Flesherton, Grand Valley, Hanover, Holstein, Markdale, Mount Forest, Neustadt, Orangeville, Owen Sound, Shelburne and Tara.

An investigation was made concerning the possibilities of supplying the following municipalities in the northern section of Peel County from the Eugenia System and estimates were prepared accordingly: Alton, Caledon Village, Caledon East, Erin, Hillsburg and Inglewood.

Bruce County District

Based on investigations and estimates prepared during the previous year, arrangements were made for constructing transmission lines and sub-stations in Bruce County, consisting of an extension of the Eugenia System transmission lines

to serve various towns in that section of the Province, such as Teeswater, Wingham, Lucknow, Ripley, Kincardine, Fordwich, Gorrie and Wroxeter.

The construction of these lines and stations was begun and the work practically completed before the close of the fiscal year. An investigation was made for extending these lines into the northern part of Huron County for the purpose of serving additional municipalities.

Ayton

Investigations were made by the Commission concerning delivery of Hydro-Electric power to this municipality, both by way of Neustadt and Holstein, and estimates were prepared and submitted accordingly. Enabling and money by-laws were submitted to the ratepayers and carried, and assistance was rendered by the Commission in placing both questions before the people.

Derby Township

An investigation and survey was made covering service to the entire municipality of Derby Township, and also covering a small section of same in the vicinity of Kilsyth.

Estimates and rates were prepared and submitted accordingly.

Fordwich

A distribution system was designed for this municipality and estimates prepared and submitted covering the construction of same, also covering the delivery of Hydro-Electric power from the Eugenia System. An enabling by-law was submitted to the ratepayers and carried and assistance rendered by the Commission in placing this question before the electors.

Gorrie

An investigation was made concerning delivery of power to this municipality from the Eugenia System, and estimates were prepared and submitted accordingly.

A distribution system was designed and estimates prepared covering the construction of same. An enabling by-law was submitted to the ratepayers covering the delivery of Hydro-Electric power to the municipality and assistance was rendered by the Commission in connection with same.

Hanover

The sub-station in this municipality was enlarged and extended and additional equipment added to provide for an increase of load. Extensions were made to the distribution system for the same purpose. Two large furniture factories, a new flour mill and additional power for the cement mill being industries for which these extensions were required. Assistance was rendered by the Commission in making these extensions and in preparing a money by-law to cover the capital expenditure for same. It is estimated that by the end of the year 1921 the load in this municipality will have increased by nearly 200 per cent. over the year 1920.

Howick Township

A survey and investigation was made in this township for the purpose of obtaining information on which to base estimates covering the cost of constructing

distributing lines for the purpose of serving farmers in the entire township with Hydro-Electric power and also for the purpose of determining rates for such service.

Kincardine

A distribution system was designed and estimates based on same prepared and forwarded to the municipality. A money by-law based on these estimates was submitted to the ratepayers and carried. Assistance was given to the municipality in connection with constructing a distribution system as well as constructing a sub-station for the purpose of providing for Hydro-Electric service in the municipality. It is expected that power will be delivered to this town early in 1921.

Waterworks

Following an inspection of the site, a layout has been made with report and estimates of electric pumping equipment, covering low-lift pumps (one of which will be steam-driven) for supply of lake water to a filter plant already arranged for, two domestic units each of 350 g.p.m. capacity, 245 feet head, coupled to a 50 horse-power motor, and one gasoline-driven fire pump of 800 g.p.m. capacity at 305 feet head coupled to a 6-cylinder engine.

Lucknow

Money and enabling by-laws were submitted to the ratepayers during the year and both questions carried unanimously. A distribution system was constructed for the municipality by the Commission and arrangements made for placing same in operation early in the New Year.

Meaford

A valuation was made of the development and distribution system belonging to the private company serving the town, for the purpose of arranging the purchase of same. Estimates were prepared and submitted covering the delivery of Hydro-Electric power to the town from the Eugenia System.

Neustadt

Assistance was rendered to this municipality by the Commission in connection with constructing extensions to serve new power customers. Estimates were prepared and arrangements perfected for restringing the transmission line from Hanover to Neustadt with a conductor of greater cross-section to take care of this additional load. An increase in power demand in this municipality for 1921 over and above 1920 conditions is estimated to approximate nearly 100 per cent.

Owen Sound

Extensions were made to the distribution system in this municipality to take care of a considerable increase in load due to the fact that a number of furniture factories were forced to become users of electric energy on account of the high cost of coal. The estimated increase in load for supplying these additional industries will approximate an increase of nearly 80 per cent. when the work in connecting same is completed.

Priceville

Enabling and money by-laws were submitted to the ratepayers during the year, and both by-laws were carried almost unanimously. A distribution system and sub-station were constructed for the village by the Commission, and arrangements made for delivering power early in the New Year.

Ripley

Assistance was rendered by the Commission to the village in submitting money and enabling by-laws. A distribution system was designed, and construction work on same started during the year.

Power will be delivered to this municipality early in 1921.

Port Elgin

A valuation was made of the local distribution system in this municipality for the purpose of negotiating the purchase of same by the municipality to facilitate the delivery of Hydro-Electric power from the Eugenia System.

Estimates covering the supply of power were prepared on this basis. An enabling by-law covering the delivery of power from the Commission was submitted to the ratepayers and carried.

Southampton

A valuation was made of the development and distribution system of the private company serving this municipality with the idea of arranging the purchase of same and operating the plant in parallel with Eugenia System for the purpose of supplying power to both Southampton and Port Elgin.

Teeswater

Enabling and money by-laws were submitted to the ratepayers during the year, and both questions were carried almost unanimously. A distribution system and sub-station were designed and constructed for the municipality by the Commission and both will be placed in operation early in 1921.

Wingham

Estimates were prepared covering the cost of reconstructing the local distribution system. A money by-law was submitted to the ratepayers and carried almost unanimously. Assistance was given to the municipality in securing and arranging for serving several large power customers. Arrangements were made for starting the reconstruction of the distribution system, which will be undertaken and completed in 1921.

Wroxeter

A distribution system was designed and estimates prepared in connection with same and submitted to the local officials. Assistance was given in connection with submitting an enabling by-law to the ratepayers; this by-law was carried by a large majority.

Walkerton

A valuation was made of the generating station and distribution system of the private company serving the town, for the purpose of arranging the purchase of

same in connection with serving Walkerton with Hydro-Electric power. An investigation was made of this plant with the idea of constructing an extension and improvements to same to provide for paralleling with the Eugenia System so as to supply power to Walkerton and the adjacent municipalities.

RURAL

Following out the policy outlined by recent legislation in respect to the distribution of electric power in rural districts, surveys were made in various townships in the Eugenia district covering possibilities of serving all farms located in each, irrespective of small sections covered by special petitions which had been forwarded to the Commission requesting service for a particular locality. Based on such surveys a complete investigation was made concerning rates for serving each farm, and estimates were prepared and distribution systems designed for serving entire townships. This work was performed especially for the Townships of Derby, Amaranth and Howick, located on the Eugenia System. Consideration was also given to serving parts of Artemesia, Proton, Normanby, Egremont, Collingwood and Osprey Townships.

WASDELL'S SYSTEM

GENERAL

An analysis of the operating reports of the various towns was made to determine equitable rates as well as to ascertain the amount of refund due the various corporations for energy supplied by each local system for public service purposes.

Assistance was rendered to the various towns in the district by the Commission in matters pertaining to the general operation of their local distribution systems. The municipalities for which this service was rendered being as follows: Beaverton, Brechin, Cannington, Sunderland and Woodville.

An investigation was made in connection with constructing new lines and sub-stations constituting extensions to existing lines for the purpose of serving loads in various townships in the district as well as the municipalities of Uxbridge and Port Perry.

The steel conductor on the transmission line from the development to Beaverton was restrung with aluminum for the purpose of taking care of additional load at Kirkfield and future loads south of Beaverton.

Kirkfield

The transmission line from Gamebridge to Kirkfield was completed and the sub-station at the Crushed Stone, Limited, plant placed in operation during the year for the purpose of supplying power to the company as well as the Police Village of Kirkfield. Enabling and money by-laws were submitted to the ratepayers of the village and carried almost unanimously.

A distribution system was designed and constructed and placed in operation during the year.

Mount Albert

An enabling by-law was submitted to the ratepayers in this village and carried almost unanimously, estimates being based on power obtained from a proposed sub-station to be located at Uxbridge, and a complete investigation was made and all information submitted to the village in connection with same.

Port Perry

A distribution system was designed, estimates prepared and submitted covering Hydro-Electric service for this village. Enabling and money by-laws were submitted to the ratepayers and assistance rendered in connection with same by the Commission and both by-laws carried almost unanimously.

Uxbridge

An investigation was made covering service to the municipality of Uxbridge, and the location of a sub-station at that village for the purpose of serving same with Hydro-Electric power as well as adjacent townships. A distribution system was designed, rates and estimates prepared and money and enabling by-laws submitted to the ratepayers and carried, based on power being supplied by the Commission from the Wasdell's System.

RURAL

Petitions were received from various townships asking for rural service in certain sections of each, and following the policy covered by recent legislation in connection with distribution of electric energy in rural districts complete surveys were made covering service to each farm in these various townships on the Wasdell's System. Based on the data secured from such surveys, estimates and rates were prepared and distribution systems designed covering transmission lines throughout each township. The townships for which this work was performed are as follows: Brock, Eldon, Mariposa, Reach, Sengog, Scott and part of Georgina, Uxbridge and West Gwillimbury.

MUSKOKA SYSTEM

GENERAL

Assistance was rendered to both Gravenhurst and Huntsville by the Commission in matters pertaining to the general operation of the local distribution system.

Bracebridge

An analysis of the operating statements of various years of the Electric Light & Power Utility of this municipality was prepared and submitted and a complete investigation made in connection with rates charged to local customers for the purpose of ascertaining the equity of existing rates in force for each class of service. Estimates were prepared and submitted covering a supply of power to this municipality from the Muskoka System transmission lines and generating station.

Gravenhurst

An investigation was made covering the supply of power to Gravenhurst Sanitarium and a valuation was made of the distribution system supplying same and rates prepared governing service. An investigation was made concerning the transmission line from the South Falls plant to Gravenhurst to determine the maximum load which could be carried in connection with giving service to the Potash Company.

Huntsville

Estimates were prepared and submitted covering additional power required by the Anglo-Canadian Leather Company. Estimates were also prepared and submitted covering the cost of constructing a portable sub-station for the purpose of supplying power in connection with the construction of provincial roads north of Huntsville.

THUNDER BAY SYSTEM

Fort William

As the Municipality of Fort William executed an agreement with the Commission at the same time as the City of Port Arthur, prior to commencement of construction work on the Cameron's Falls Development, considerable work was undertaken and investigations made in connection with securing a suitable location for a station site which would be satisfactory for supplying power to both municipalities. Estimates were prepared covering the delivery of power from Cameron's Falls Development to existing and prospective industries in Fort William. As the agreement between the Kaministiquia Power Company and the City of Fort William has not yet expired, consideration was given to the construction of distributing lines in this municipality to take care of large power customers direct from the Commission's transmission lines independent of the existing local distribution system. Until more definite information was available as to Fort William's loads, arrangements were made to take care of existing customers in the city desiring service from the Commission, by means of an additional feeder from the temporary terminal station located at Bear Point.

Nipigon Village

Investigations were made covering service to the Nipigon Fibre & Paper Company, located at the Village of Nipigon. Estimates and rates were prepared and a contract executed for supplying power to the company.

Port Arthur

Estimates and rates were prepared at various times covering a delivery of various amounts of power to this municipality from the new Cameron's Falls Development for the purpose of supplying power to new industries. Assistance was rendered to this municipality in connection with closing contracts for supplying power to the Canadian National Elevator and the Kaministiquia Pulp & Paper Company. The demand for power in Port Arthur during the year increased steadily, necessitating the ordering of additional amounts from time to time from the Kaministiquia Power Company and the indications at the present time are that a number of new pulp and paper mill industries will be established in the city during the coming year, which, together with the extensions being constructed to existing industries will require additional amounts of power from the new development at Cameron's Falls. Assistance was rendered to the local officials in connection with general operating matters pertaining to the Port Arthur Distribution System.

NIPISSING SYSTEM

GENERAL

This system supplies power to the municipalities of North Bay, Powassan, and Callender and is operated by the Commission in a similar manner to the Central Ontario System. After careful investigation and preparation of estimates several storage dams were constructed on the South River for the purpose of conserving water and regulating stream flow to provide for additional power to the generating station supplying the district. An investigation was made, estimates prepared and arrangements were perfected for overhauling the turbines and generators at the generating plant and installing new units and transformers for the purpose of increasing the total capacity of same so as to provide for growing loads in the district as well as for the purpose of doing away with the steam plant located in North Bay, which has been used in the past in connection with the hydraulic generating plant for supplying the power requirements of the various municipalities.

NEW ONTARIO DISTRICT

GENERAL

Whereas there are no towns under contract with the Commission in this district, considerable work has been performed for various municipalities located in same and requests have been received at various times for engineering advice and assistance in solving problems relating to the supply of power for individual municipalities, details of which follow:

Cochrane

A valuation was made of the local distribution system belonging to the private company supplying service to the town and rates and estimates prepared covering service under municipal ownership and assistance given to the municipality in connection with the purchase of the property.

Capreol

Engineering advice and assistance was given to this municipality in connection with the design and installation of a distribution system and in obtaining a supply of power from one of the various developments located adjacent to same.

Kenora

Assistance was rendered to this municipality in connection with the negotiation of the sale of its development to a private corporation, and the conditions under which the operation would be carried on in future by such an arrangement, and an engineer of the Commission visited this municipality for this purpose.

Mattawa

A valuation of the private owned plant and distribution system in Mattawa was prepared and submitted for the purpose of negotiating the purchase of same and operation under municipal ownership. Estimates and rates were prepared and submitted covering service under such conditions and assistance rendered to the municipality in negotiating purchase from the company.

Monteith

Assistance was rendered to the Department of Agriculture in connection with remodelling and operating the development at Monteith, constructed for the purpose of serving the Demonstration Farm and the Military Training Station, as well as the village with electric energy for lighting and power purposes.

Parry Sound

Assistance was rendered to this municipality by the Commission in connection with placing its new plant in operation and in connection with determining rates for charging various classes of customers supplied from same, and engineers of the Commission visited this municipality at various times for this purpose.

Sturgeon Falls

Assistance was rendered to this municipality in connection with negotiating for a supply of power from the Spanish River Pulp & Paper Company, and in connection with the granting of the Crown Lease for development at Smokey Falls by the company.

South River

Assistance was rendered this municipality in connection with the preparing of a valuation of the private owned company's plant and in determining rates for service under municipal ownership.

CENTRAL ONTARIO SYSTEM

GENERAL

The construction of the tie line between Peterboro and Healey's Falls opened up a new area in the system, making possible economical rates to Norwood and Havelock.

The general growth of load has been satisfactory, and the system load now exceeds the load in the munition manufacturing period.

The Ranney's Falls plant, with a rating of 10,000 horse-power, is expected to be in operation in the Fall of 1921.

Bloomfield

The power load has been increased by the addition of one canning factory and a milk condensery.

A by-law has been passed to borrow \$5,500 for the purpose of extending the street lighting system to the limits of the village. Construction will be carried out next Spring.

Cobourg

Due to the increasing demand, chiefly for factory purposes, a new electric unit has been installed in the pumping station, supplied by Messrs. Goldie & McCulloch, and consisting of a Roturbo, 4-stage pump of 1,000 Imp. g.p.m. at 240 feet total head, coupled to a 100-horse-power Westinghouse 3-phase, 60-cycle, 2,200-volt motor, operating at 1,150 r.p.m., the contract price being \$3,838.

Arrangements are being made to have the four present 750-gallon electric pumps fitted with new impellers to give increased head and decreased volume, in accordance with the demand for higher pressure in the mains.

Installation has also been made of chemical toilets in the engineer's residence and pumping station.

Havelock

A by-law was passed to issue debentures for \$28,900.00 to purchase the existing distribution system of the Havelock Electric Light and Power Co. and to reconstruct this system. This reconstruction is under way, and the construction of a feeder from Norwood Transformer Station is also going on. It is expected that the lines will be made alive early in 1921.

Kingston

A 10% rate reduction was put into effect at the first of the year.

Lakefield

A by-law was passed in January to issue debentures for \$33,500 to purchase and reconstruct the local distribution system of the Lakefield Electric Light Co. A contract was signed for supply of power by the Commission. Construction was rushed owing to the destruction by fire of the Lakefield plant. Service was given July 19, and the distribution system is now practically completed.

Power was supplied to a saw-mill, a construction company and a grist mill. A demand of 120 k.w. was established.

Marmora

By-laws were passed in January and a contract was signed for supply of power by the Commission. Fourteen thousand dollars is to be spent in remodelling the distribution system. The construction is being carried on now. The outdoor type transformer station is also under construction. The system will be in operation before the end of the year.

Norwood

A by-law to issue debentures for \$33,100 was passed to purchase the local electric light system and provide a new distribution system. A contract was signed for supply of power by the Commission. The new distribution system is practically completed, and service is expected through Norwood Transformer Station early in 1921.

Omemee

The Omemee Tanning Co. is building additions to its plant, and has signed a power contract for 150 horse-power.

Oshawa

Plans were prepared and considerable work has been done to improve the distribution system to take care of the rapidly-increasing load.

A new blast unit for the generators in the gas plant is being installed, consisting of a Sturtevant special blower, direct-connected to a 20-horse-power 3,460-r.p.m., C.G.E.-motor, at a cost of about \$1,200, and the holder capacity has been

increased by the addition of a second lift. Due to irregularities in the holder tank, discovered when this was pumped out, it has been found necessary to provide for additional outerguide framing to the upper lift, and the necessary structural steel will shortly be erected.

Additional boiler capacity has been provided for the present plant, and tenders have been called for on a complete coal-gas plant with vertical retorts and modern equipment, having an ultimate capacity of 200,000 cu. ft. per day.

Peterboro

Radial Railway.

New track has been laid on George Street from the C. P. R. Station to Romaine Street.

Gas Plant.

Owing to the increased demand for gas, the present purifier plant is now too small for economical operation, and a layout doubling the capacity is being prepared, provision having been made in the original plant for such increase.

A steam-driven booster has been installed to give higher pressure than can be thrown by the holder during the mid-day period of maximum consumption, and modern tar and oil separators are being installed to purify the effluent from the works before this is discharged to the river.

A coal conveyor from a pit under the railway siding to the storage pile has been constructed and is expected to be in operation shortly.

Utilities Commission.

The removal of wood poles on George Street and Charlotte Street was completed. Considerable reconstruction of the distribution system was carried out and a large number of old poles removed from the streets. The power load had increased until it exceeds the load carried during the war.

Picton

The power load has increased very satisfactorily.

Considerable work has been done on the reconstruction of the distribution system.

A visit of inspection was made to the pumping station, and the installation of electric units and connections to the present system found satisfactory. The work referred to in the 1919 report has been completed.

Stirling

The sub-station at Stirling has been changed from single-phase to three-phase to enable the town to supply service to a grist mill.

Tweed

The street lighting transformer has been moved from the old steam plant to a location in the centre of the town, and will be controlled by a time switch.

Wellington

The local distribution system was completed early in 1920, and most of the poles of the old Niles system have been removed from the streets. The main street-lighting fixtures have been equipped with frosted globes.

RURAL

Rates for farm service have been submitted and public meetings held, at which the rates were explained to the petitioners, in the following townships: Brighton Darlington, Thurlow.

Rates for farm service have been submitted to the following townships: Camden, Fenelon, Hallowell.

Rates for street lighting have been submitted in the following townships: Whitby, East Whitby, Asphodel, Pickering.

A survey was made and estimates are in preparation for farm service in the townships of Hamilton, Haldimand, Cramahe and Brighton.

A public meeting was held in North Monaghan Township with reference to suburban and rural service from Peterboro.

H.E.P.C. Pulp Mill

A broken grinder frame was successfully repaired at short notice by electric welding, also a broken bearing cap on the 1,200-horse-power motor, both these repairs being executed at the Davenport Works of the Canadian Allis-Chalmers Company.

Tenders have been called for on a second 1,200-horse-power motor, 257 r.p.m., 2,200 volts, to replace a smaller motor which is of insufficient power to operate the six pockets on the present grinders.

Consideration has also been given to the increase of grinding capacity by 50 per cent., and proportional additions to equipment of wet machines and presses.

An additional boiler, 72 in. x 17 ft. 6 in., has been purchased for the plant at Bancroft, and a contract has been let to the Wm. Hamilton Co. for complete mechanical equipment of log-haul, slasher, barking drum, conveyors and transmission machinery for a new rossing plant, the capacity of the 8-ft. x 30-ft. drum to be 100 cords per day of 10 hours, the contract price being \$23,440, and complete delivery is expected by the end of December. Final drawings of the layout, foundations and framing of the slasher-house are now being prepared.

RIDEAU SYSTEM

GENERAL

Marked progress has been made by the municipalities on the Rideau System during the past year, the lighting and power loads in each town having greatly increased, and the number of consumers having become more numerous. The amount of power taken from the Commission has more than doubled, the Town of Smith's Falls alone having increased its load during the past two years from 400 to 1,000 horse-power. This showing is all the more remarkable when it is considered that until this year the System has always laboured under the disadvantage of a shortage of power which, during the first months of this year, became most acute in the towns of Smith's Falls and Perth, owing to the low water conditions prevailing on the Rideau River. It was, therefore, a great relief to all concerned when, on May 1st, 1920, the Commission completed the new power development at High Falls on the Mississippi River and started to deliver power, thereby providing the System with a source of power ample for its needs, and having a reserve capacity of 1,500 horse-power for future development.

The municipalities concerned have now three sources of power, viz., High Falls, the Rideau Power Company, and Carleton Place Generating Station, which is shut down, and acts as a stand-by plant for the System, assuring them a continuous and ample supply of power for the future.

An analysis of the operating statements of the municipalities is being prepared for the purpose of investigating the application of the lighting and power rates, as well as the rates charged for street lighting and the operation of the waterworks pumping plant.

Two additional municipalities have passed their enabling and money by-laws, and will be added to the System during the coming year, while an estimate has been prepared showing the cost of 400 horse-power for a private company who proposes to take power from the Commission on this System.

Smith's Falls

The amount of power taken by this municipality from the Commission has increased from 450 horse-power in October, 1919, to 1,052 horse-power in October, 1920, this increase being due to the closing down of the local hydraulic plant and large additional power loads taken by existing consumers.

A considerable amount of work has been done by the municipality in remodeling and extending its distribution system to take care of increasing business. Two large power users have greatly increased their power load, while a great number of lighting consumers have been added to the System.

Waterworks Pumping

Tests were made on the domestic units installed in the pumping station, described in the previous Report. This work is completed.

Perth

During the year the load in this municipality has increased from 342 horse-power to 557 horse-power, due to closing down local generating plants and general extension of business. Remodelling of the distribution system has been carried on, and a new series street lighting system installed in place of the old town arc light system. Two new factories have changed over from steam to electric drive during the year.

Carleton Place

This municipality has been receiving its power from the Commission's station at Carleton Place, which was purchased in May, 1919. During the year the 26,000-volt transmission line connecting this municipality to the supply of power from High Falls was completed. The old generating station has been remodelled to take 3 250-kv-a. 26,400/2,200-volt transformers, with the necessary high-tension switching.

The Carleton Place load has increased from 514 horse-power in October, 1919, to 694 horse-power in October, 1920, this increase being due to increased power loads taken by the local woollen industries.

Lanark

The Village of Lanark has this year passed its enabling and money by-laws. Estimates were prepared by the Commission showing the cost of power and the cost of a new distribution system in the village.

Kemptonville

Estimates on the cost of power and the cost of a new distribution system were prepared by the Commission and submitted to the Village of Kemptonville. The municipality has passed its enabling and money by-laws and is about to conclude a contract with the Commission. Its estimated load for the first year will be about 75 horse-power. Negotiations are in progress for purchasing the old privately-owned plant.

Arnprior

At the request of the municipality, investigations were made regarding service given and rates charged by the Galletta Power Company in the Town of Arnprior. A report on the subject was prepared and recommendations forwarded to the municipality.

Rural Surveys

Surveys were made of the rural district in the vicinity of Lanark and Kemptonville to determine if the farmers in this district could be served with light and power. Estimates and rates to farmers in these districts have been prepared, and will be submitted to the petitioners early during the coming year.

ST. LAWRENCE SYSTEM

With a more adequate supply of power available for this district, definite efforts were made to extend the system. New lines were under construction to serve a number of municipalities which had passed the necessary by-laws and signed agreements for a supply of power. Requests were received from many municipalities for information on supply of power, estimates of cost of power and manner of procedure. Assistance was rendered these municipalities and information supplied on amount of power required, cost of such supply, etc. Information was also supplied these municipalities in regard to cost and extent of local distribution system adequate to serve the possible business available. A number of requests were received for estimated cost of large blocks of power to prospective industries in search of suitable location.

Some study was devoted to the problem of transmitting power economically over the System. Growth of loads will eventually necessitate radical changes, and investigation was made into the most desirable manner of altering the lines and stations for increased voltage. A definite plan of procedure cannot be decided upon until the quantity of power or rate of growth of load is known.

Alexandria

Following negotiations between the municipality and the Commission, enabling and money by-laws were passed in January, 1920. The local distribution system has been rebuilt for 4,000-volt operation. The 300-kv-a. pole-type transformer station to serve the municipality is nearing completion, and it is expected that service will be supplied early in 1921 from a 26,400-volt transmission line being constructed from the Cornwall High-Tension Station.

Waterworks Pumping

From data furnished by the municipality, recommendations and estimates have been made for electric domestic pumping and gasoline-driven fire service, and a contract has been let to the Canadian Allis-Chalmers Co. for one 250-gallon pump at 205 feet head, coupled to a 30 horse-power induction motor.

Apple Hill

Hydro enabling and money by-laws were passed in January, 1920, providing for a supply of Hydro power from the Alexandria district line which will pass through the police village. The privately-owned direct-current distribution system has been purchased by the municipality, and is being re-built for 4,000-volt, three-phase operation. Power will be delivered early in 1921.

Avonmore

Requests were received early in the year for estimates on a supply of power from the St. Lawrence System. Estimates of the cost of power and of the cost of building a distribution system were prepared and submitted to the municipality. Enabling and money by-laws will be submitted early in 1921. It is proposed to serve this district by a 4,000-volt rural line from Apple Hill.

Brockville

A considerable increase in load has been effected by the addition of new power contracts. Rural extensions to the Brockville Asylum Farm and St. Mary's College have been put in operation. A number of estimates were made for supply of power to proposed new industries desiring a suitable location.

Waterworks Pumping

Revision for increased population has been made on previous reports, recommending motor-driven units for domestic service, with booster and stand-by gasoline units for fire service.

A pitot survey of waterworks mains and losses of system was undertaken. A number of excessive losses were located, station meters were checked and were found to be correct. A recommendation was made covering installation of sufficient valves to adequately sectionalize the mains.

Casselman

A valuation was made of a privately-owned distribution system in the village. Estimates on the cost of a new distribution system and on the cost of a supply of power to be delivered over a 4,000-volt line from Maxville, have been prepared and are ready to submit to the municipality.

Chesterville

Alteration in retail rates was necessary owing to increased cost of power from the new source at Cornwall. This required careful study of local operation costs and revenue, also the probable growth in business. Efforts were directed toward extending rural lines out of the municipality, and some success in this direction was attained.

Cornwall

In December, 1919, an effort was made by the Stormont Electric Light Company to have its franchise renewed for ten years. Opposition to this move was evidenced by a portion of the municipal voters and influential citizens. Assistance was rendered by the Commission to oppose the granting of this extension, and the by-law was defeated when voted upon.

The municipality has been active in trying to secure location for prospective industries, and the Commission has furnished estimates to a number of industries desiring cost of power in this locality. The Toronto Paper Company, which is now receiving power in this district, is making extensive additions to its plant, and will require a considerable increase in power.

Finch

Requests were received from the municipality early in the year for estimates on the cost of Hydro power. A survey was made and estimates prepared on the cost of power, and also on a new distribution system for the village. Enabling and money by-laws will be placed before the ratepayers early in January, 1921. It is proposed to serve this village and district by a 4,000-volt rural line from the Chesterville substation.

Lancaster

Enabling and money by-laws were passed early in the year. A comprehensive distribution and street lighting system is being installed, and the village will receive power early in 1921 over a standard 4,000-volt rural line from the substation at Martintown.

Martintown

The police village of Martintown contracted early in the year for a supply of power. A distribution and street lighting system is being installed, and power will be supplied early in 1921 from a 150-kv-a. pole-type transformer station located north of the village limits.

Maxville

The Village of Maxville passed enabling and money by-laws in connection with Hydro-Electric service in January, 1920. During the year a modern distribution and series street-lighting system has been installed. Service will be supplied to the municipality early in 1921.

Newington

In response to requests from the Police Village of Newington, surveys were made to determine the best manner of serving the municipality and district. Estimates were prepared on the cost of power and also on the cost of a modern distribution and street-lighting system. Enabling and money by-laws will be placed before the ratepayers early in 1921. It is proposed to supply this police village from a standard 4,000-volt rural line from Chesterville via Finch.

Prescott

Investigation into the existing retail rates required the adjustment of street lighting tariff, which had never been altered since the inception of Hydro service. With this adjustment it was not considered necessary to make further alteration of retail rates to meet the increased cost of power to the town from Cornwall. The municipality has purchased a small electrically-driven turbine pump, driven by a

25 horse-power induction motor. The present unit for pumping was too large and unsuitable conditions prevented the town using it for pumping at off-peak periods.

Spencerville

On the request of municipal officials, estimates are being prepared on the cost of power to be supplied over a standard rural line from the Municipality of Prescott.

St. Isidore de Prescott

Following a request received from the Trustees of the Police Village of St. Isidore, surveys were made to include this village in a proposed extension north of Maxville. Estimates were prepared and submitted, and Hydro by-laws will be placed before the ratepayers in January, 1921.

Williamsburg

A 50-kv-a. 26,000/2,200-volt single-phase, pole-type transformer station is being installed to serve the police village. Service was formerly obtained over a 2,300-v. three-phase line from Morrisburg. Owing to the Commission's being notified that this service could not be continued by Morrisburg, the above station was necessary.

Winchester

Owing to increased cost of power supplied from the new source at Cornwall, retail rates were increased. A study of local operation was made to determine what would be an equitable increase of retail rates. This required collecting data, including an up-to-date map of the lines in the municipality, operating costs, revenue and possible natural growth of business.

Winchester Springs

This municipality has been waiting long for Hydro service. Requests were made in the early development of the system, but owing to insufficient supply of power, delay was unavoidable. The municipality finally voted on the necessary by-laws and signed an agreement for power. Two schemes for serving the municipality are under consideration. One requires a transformer station erected in the municipality adjoining the existing transmission line; the other requires erecting a line from Williamsburg and including service to rural customers. One of these schemes will be decided upon during the winter, when the rural district will be canvassed.

St. Lawrence Rural Districts

Exhaustive surveys were carried on in the following townships to arrive at the best method of serving farms and hamlets where petitions have been circulated. Estimated rates are being prepared to determine the cost of supplying power to many districts in these townships, and rates will be submitted to the petitioners during the coming year:

Glengarry County: Lancaster Township, Charlottenburg Township, Lochiel Township, Kenyon Township.

Prescott County: S. Plantaganet Township.

Russell County: Cambridge Township.

Stormont County: Roxborough Township, Osnabruck Township, Cornwall Township, Finch Township.

Dundas County: Winchester Township, Mountain Township, Williamsburg Township, Matilda Township.

Grenville County: Augusta Township, Edwardsburg Township.

Leeds County: Elizabethtown Township.

SECTION VII

GENERAL ACTIVITIES OF THE COMMISSION

ELECTRICAL INSPECTION DEPARTMENT

The past fiscal year closed the biggest year in the history of the Commission's Electrical Inspection Department. This is due in a large measure to the extensive building operations throughout the Province and to the ever-increasing demand for electric light and current-consuming devices for domestic purposes, such as electric irons, toasters, grills and other cooking utensils, the washing and sewing machine motors, and the innumerable other conveniences for the saving of time and labour. There has been a wonderful change in the last few years and the people are no longer willing to content themselves with the older methods. This is borne out by the fact that the records of the Electrical Inspection Department show a large percentage of permits filed have been for the wiring of new houses and fixture installations, and extra wiring to existing installations for the attachment of heaters and other devices of all kinds, and during the year the Department received 87,399 paid applications for new wiring, while 160,990 inspections were made.

The efforts of the Department, however, are not alone confined to the inspection of new installations, as considerable time has been devoted to the inspection of the older ones and have been successful in having improvements made in old and defective wiring, which has been remodelled or replaced by new wiring and equipment, at an approximate expenditure of \$557,033. In spite of the high cost of labour and materials, little difficulty was experienced in persuading the owners or tenants of buildings of the necessity of overhauling old and obsolete installations, which in many instances constituted both a fire and life hazard.

The annual permit arrangement is rapidly gaining favour with owners of industrial plants, mercantile buildings, other establishments and institutions employing their own staff of electricians, as by paying an annual fee (which is determined by the number of employees of the plant to be inspected) a permit is issued which not only obviates the inconvenience to the owners of such plants having to take out separate permits, as required by the Act, for each individual change they require to make to the existing installation, but entitles them to an inspection at least once a month, or more frequently if occasion demands. A written report is forwarded to the owners following each inspection, which keeps them fully informed as to the amount and class of work which is being done by their electricians, and at present practically all the industrial plants throughout the Province have, on account of the benefits which they have derived from this arrangement, made contracts for annual permits with the Commission and a considerable revenue is derived from this source alone.

RURAL POWER

Owing to the high cost of construction, existing labor conditions and shortage of power in the Niagara District, the Commission has confined its efforts to the making of surveys in districts from which petitions have been received.

At the Commission's request the legislation was passed amending the Power Commission Act so as to provide for the supply of power to rural districts so that systems need not necessarily be confined to the limits of geographic township boundaries, but could be arranged to provide for the most economic distribution of power from the nearest distribution centre. The Act, as amended, is as follows:

30e. Subject to the approval of the Lieutenant-Governor in Council, the Commission may enter into a contract with the municipal corporation of a township or with a municipal corporation of two or more townships for the supply and distribution of electrical power or energy in a defined area (hereinafter called a rural power district), including a part of such township or parts of each of such townships, and the Commission may, in pursuance of such contract, construct and operate all works necessary for the transmission of electrical power or energy to the rural power district and for the transforming and distributing of such electrical power or energy to the premises of the persons within the rural power district as so defined or as enlarged or altered from time to time by the Commission, with the approval of the Lieutenant-Governor in Council and the municipal council of councils;

Contracts for construction and operation of distribution works in townships

30f. The council of the township or the council of each of such townships party to such contract, may pass a by-law for entering into such contract and may execute the same, and it shall not be necessary to submit any such by-law to the vote of the electors or to comply with any of the other forms required in the case of a by-law passed under Part 1 of this Act;

By-law.

30g. (1) The Commission shall annually fix, adjust and apportion the cost of all the works mentioned in section 30e to be borne by each of the municipal corporations entering into such contract;

Apportionment of cost of annual adjustment.

(2) The total amount for which each of the corporations shall be liable shall include a sum sufficient to provide annually the corporation's proportionate cost of the capital cost of the work so as to form in thirty years a sinking fund for the payment of the amount expended by the Commission on capital account for the acquisition or construction of the works necessary for transmitting, transforming, distributing and delivering electrical power or energy in a rural power district, and a further sum sufficient to pay the Commission interest upon the proportionate part of such expenditure to be borne by the corporation, and a further sum to pay the corporation's proportionate part of the line loss and the costs of operating, maintaining, renewing and insuring of such works and of the other charges set out in section 23.

30h. The rates to be charged to customers receiving electrical power or energy from the Commission in a rural power district shall be fixed by the Commission from time to time, and shall be sufficient to provide the sum necessary to pay all the charges to be borne by the corporation under section 30g.

Rates.

Application of
Part 1.

30i. All of the provisions of Part 1 as to the annual payments to be made by the corporations which have entered into contracts with the Commission shall apply to a contract entered into under this Part.

Collection
of rates.

30j. Where any person receiving a supply of electrical power or energy in a rural power district is in default of payment of any account due in respect of such supply, the Commission may notify the corporation of the municipality in which the premises of the person so in default are situate, stating the amount due and such amount shall thereupon be entered upon the collectors' roll of the municipality and collected in the same manner as other taxes.

Surveys have been made in different parts of the Province from which petitions have been received; so that on receiving other petitions the Commission will be in a position to submit at once a rate with the full knowledge of the existing conditions and the possibilities of extensions to the area adjacent to that from which the petition is received. With this information, it will be possible for the Commission to submit rates in districts on the basis of a uniform service charge and a consumption rate for all service which is given from each distribution centre. Below is a list of townships in which surveys have been made, on the different systems:

NIAGARA SYSTEM

Ancaster Township.	Saltfleet Township.
Barton “	Stamford “
Beverley “	Thorold “
Blandford “	Dorchester “ North.
Blanshard “	Downie “
Brantford “	Flamboro “ East and West.
Burford “	Grantham “
Crowland “	Louth “
Niagara “	Nelson “
Nissouri E. “	Townsend “
Oakland “	Trafalgar “
Oxford “ North, East and West.	Waterloo “
Pelham “	Zorra East “

EUGENIA SYSTEM

Derby Township.	Normanby Township, in part.
Amaranth “	Egremont “ “ “
Howick “	Collingwood “ “ “
Artemesia Township, in part.	Osprey “ “ “
Proton “ “ “	

WASDELL'S SYSTEM

Brock Township.	Scugog Township.
Eldon “	Georgina Township, in part.
Mariposa “	Uxbridge “ “ “
Reach “	West
Scott “	Gwillimbury “ “ “

SEVERN SYSTEM

Innisfil Township.	Floss Township, in part.
Tecumseth “	Nottawasaga Township, in part.
West Gwil-	Tay “ “ “
limbury “	

CENTRAL ONTARIO

East Whitby Township, in part.	Cramahe Township, in part.
West Whitby “ “ “	Brighton “ “ “
Darlington “ “ “	Hallowell “ “ “
Hamilton “ “ “	

ST. LAWRENCE SYSTEM

Lancaster Township, in part.	Finch Township, in part.
Charlottenburg “ “ “	Winchester “ “ “
Lochiel “ “ “	Mountain “ “ “
Kenyon “ “ “	Williamsburg “ “ “
S. Plantaganet “ “ “	Matilda “ “ “
Cambridge “ “ “	Augusta “ “ “
Roxborough “ “ “	Edwardsburg “ “ “
Osnabruck “ “ “	Elizabethtown “ “ “
Cornwall “ “ “	Yonge “ “ “

RIDEAU SYSTEM

Wolford Township.	Lanark Township.
Oxford “	Drummond “

OTTAWA SYSTEM

Nepean Township.	Gloucester Township, in part.
Coulbourne Township, in part.	

ELECTRIC RAILWAY WORKPROPOSED NEW RAILWAY LINES

During the year final surveys have been completed and revised estimates prepared for the construction of some 122 miles of new lines. It was the intention that together with certain existing lines or portion of lines to be acquired these should form parts of three main railway divisions—The Toronto Eastern from Toronto to Bowmanville, The Toronto-Niagara from Toronto to some point on the Niagara Frontier, and the Wentworth-Waterloo from Hamilton to Galt with connections to Guelph, Elmira and the principal towns and cities in Wentworth and Waterloo Counties.

The proposed new mileage, as distinct from that of existing trackage to be acquired, distributed under these divisions was:

Toronto-Niagara	63.36	route miles
Toronto-Eastern	24.38	“ “
Wentworth-Waterloo	34.56	“ “

The survey work involved the examination of a number of alternative routes before the final location plans could be prepared. These were then completed and copies filed with the various municipalities through which the lines passed. The collection and compilation of data covering the lines, through Toronto and Hamilton in particular, required a great deal of preliminary field and office work. In the case of the Toronto-Niagara Division portions of the right-of-way between Toronto and Oakville essential to the scheme were acquired. Previous to January 1, 1920, by-laws approving the construction of that portion of the Toronto-Niagara Division between Port Credit Junction and St. Catharines had been ratified by all the municipalities affected, with one exception. These municipalities later deposited debentures to the amount of the cost of the work as originally estimated with the Commission whose own bonds for a like amount were subsequently guaranteed by the Government. The portion of the line between Toronto and Port Credit Junction had previously been voted on as a part of the original Toronto-London scheme.

For the Toronto Eastern all the interested municipalities which had not done so previously have during the past year passed by-laws endorsing the acquisition of the existing line and its extension through to Toronto.

In the case of the Wentworth-Waterloo Division similar by-laws were submitted to 14 out of 17 municipalities on January 1, 1920, and carried by 13 of these.

In addition to the preliminary and location surveys undertaken in connection with the above, on the Toronto-Niagara and Toronto Eastern Divisions progress was made with the necessary land surveys preparatory to securing a through right-of-way.

Other survey work included a location from London to Brantford, a connection to the Wentworth-Waterloo Division between Dundas and Galt, and in anticipation of the acquisition of the Metropolitan Division of the York Radial, the running of certain lines with a view to establishing physical connection between this and the proposed terminal near the foot of Yonge street.

EXISTING LINES OWNED OR TO BE ACQUIRED

Toronto-Niagara Division

The only portion of an existing line which it is at present contemplated to utilize as a portion of this division is that part of the Hamilton Electric Radial Railway extending from Oakville to the east limits of Burlington. Sufficient information as to this was secured to compute its reproduction cost.

Toronto Eastern Division

Since the survey made last year of the constructed portion of this line, the property has still further depreciated, and owing to this, and to the general rise in costs a new computation had to be made in connection with the revised Toronto-Bowmanville estimates of the amount necessary to put the property into operating condition.

Wentworth-Waterloo Division

A traverse of the G.T.R. between Guelph and Galt was made early in the spring and from this was estimated the cost of its reproduction and electrification. A similar estimate which had previously been made for the branch of the same system between Galt and Elmira was revised so as to bring both valuations to the same basis.

Guelph Radial Railway

Early in the year the City of Guelph, which owns the street railway operating within the city limits, submitted a by-law to the electors embodying a proposition having in view the purchase and operation of the property by this Commission; the intention being that in addition to the ordinary street railway business it should serve as a terminus for the Guelph branch of the Wentworth-Waterloo Division and a link between it and any future Hydro-Electric Railway connection with Toronto.

The result of the vote was favourable to the scheme and arrangements were being made to install such renewals and betterments as were urgently required as soon as an Order in Council should authorize the necessary agreement with the city, but were abandoned on this being withheld by the Government.

M. C. R. and G. T. R. Bridges, Chippawa and Montrose

In accordance with plans prepared by the Department and approved by the Michigan Central Railroad Company last year the old swing bridge carrying that company's tracks across the Welland River, which had been moved upstream on to a temporary diversion, was replaced in its original position and connected up with new approach spans at either end, the whole being supported on concrete piers and abutments which had been constructed in the interim.

For the superstructure of the same company's crossing of the canal at Montrose a contract was let to the Canadian Bridge Company on January 6th, 1920. By October 20th all the material had been fabricated and was being shipped to the site. In the meantime, the company's tracks had been diverted on to a timber trestle in accordance with an agreement entered into after somewhat prolonged negotiations.

Combined M.C.R.-G.T.R. Arch near Niagara Falls

The placing of concrete in this structure, which had been suspended by mutual consent of the contracting parties during the cold weather, was resumed later in the season after the false work for the arches had been erected. The work is rapidly nearing completion. Several minor changes in design and in the method of carrying out the work were adopted after discussion with representatives of the two interested railway companies.

Chippawa Highway Bridge

Owing to unprecedented conditions in the structural steel market, combined with shortage of cars and railway strikes, the Hamilton Bridge Company, which had been awarded the contract for the fabrication and erection of this bridge, was granted an extension of time in which to complete the work. The

pouring of the concrete for the substructure was finished by the end of June, but the removal of steel piling and back-filling was not hurried. Practically all of the steel for both approach and bascule spans has been fabricated.

RELATIONS WITH OTHER PUBLIC BODIES AND PRIVATE COMPANIES

During the year a large number of public utility agreements were executed. In some cases a letter of consent was sufficient authority to proceed with the matter under consideration; in others an order of the Ontario or Dominion Railway Board was first required. The figures for the Board orders given below include all those which affected operations of the Commission directly or indirectly during the year.

Statement of Agreements, Orders in Council, Board Orders, etc., Negotiated.

Item	Previously Negotiated	1920	Total
Wire crossings	1,687	125	1,812
Undercrossings	33	8	41
Miscellaneous agreements	77	63	140
B.R.C. orders	66	109	175
O.R.B. orders	6	30	36
Electric Power Co. agreements	229	—	229
Ontario Power Co. agreements	21	2	23
Total	2,119	337	2,456

LAND SURVEYS

A large amount of work has been undertaken since the date of the last report in connection with surveys, plans and records of land or rights purchased or of which the purchase is contemplated by the Commission.

The procedure adopted has been first of all to make the necessary surveys. This frequently involves a search in land titles or registry office for documents bearing on the property under consideration. From the data so collected a plan is prepared to be used in obtaining an option or completing a purchase. An index card is then made out and filed. This contains all the necessary information regarding that particular property. In the case of a continuous right-of-way or large block of land made up of a number of smaller parcels purchased from different owners, a title record plan is prepared showing each of the latter in its relation to the whole.

In addition to the above a series of title record books has been commenced. In these books all deeds of the Commission, together with attached plans, are copied. The information in the deeds is typed on printed forms. These forms have a heading for every detail, such as "Grantor," "Purchase Price," "Surveyor's Description of Land," etc. The Commission now has about 1,600 deeds of land and this record will make such information very easy of access.

The following summary statement shows the work accomplished during the year, by the Land Surveys Branch:

Power Transmission Line, miles surveyed and mapped..	3
Power Transmission Line, miles mapped only	38
* Power Canal, Power and Substation Sites, acres surveyed and mapped	441
Railways, miles surveyed and mapped	60
Deed Index Cards recorded	100
Other Index Cards recorded	1,022
Deeds entered in Record Books	313

Toronto Suburban Railway

A valuation of this property, segregating the portions which might be operated as part of the Toronto Street Railway System, was made as a check on the sale price approved by the Dominion Government. A survey and estimate were also made for a connection between the Guelph branch near Lambton and the proposed main line of the Toronto-Niagara Division via the old Belt Line of the G.T.R.

Niagara, St. Catharines and Toronto Railway

An option on this line, in addition to those on the Toronto Eastern and Toronto Suburban Railways was obtained from the Dominion Government in June, and, as in the case of these latter, a check on the purchase price was made by valuating the physical assets. The estimated cost of an independent line between St. Catharines and Niagara Falls was also made, using as a basis a location run in the autumn of 1919.

Peterboro Street Railway

In order to conform with certain street improvements contemplated by the City Council, and at the same time to renew some of the original track which had fallen into disrepair and become obsolete, the Commission during the past season had the old 56-pound rails removed from George street for a distance of 2,340 feet and replaced with new 85-pound steel on a concrete foundation with pavement of the same material for the width of the roadbed.

Essex Division

In accordance with the by-law passed by the interested municipalities in December, 1919, the Sandwich, Windsor and Amherstburg and Tecumseh lines of the Detroit United Railways were taken over by the Commission on April 1st of this year and have since been operated by it as the Essex Division of the Hydro-Electric Railways. During the succeeding seven months some much needed betterments were proceeded with. These included increasing and rehabilitating equipment, double tracking 3,500 feet on London street from Ouellette to Elm street, installing new "Y" at the Ford Plant and renewing turnouts and intersection at corner of London and Ouellette streets. Studies were also made for a proposed down town loop in order to relieve present congestion and improve operating conditions. An estimate has been prepared for a new Belt Line in Walkerville and Windsor, which it is expected to construct in 1921. Numerous betterments to equipment and roadbed are expected to be undertaken in the near future that will materially improve the service on these lines.

INFORMATION REQUESTED BY RADIAL RAILWAY COMMISSION

The Commission which had been appointed by the Ontario Government under Order in Council dated July 21, 1920, to investigate and report on the Hydro-Electric Power Commission's proposed railway programme requested, at its first and subsequent sittings, the production of a large mass of information which had either not been prepared or was not in shape for presentation. The compilation of the necessary maps, profiles, estimates and statements in the form requested, occupied the time of the Railway Department staff for many weeks, during which time, however, the prosecution of the Commission's original programme was suspended.

QUEENSTON-CHIPPAWA DEVELOPMENT

Alterations to International Railway and Queenston Power House Spur Lines

Negotiations with all the interested parties having been satisfactorily concluded and the necessary right-of-way purchased, work on the diversion of the International Railway at Queenston and the spurs from it to the Michigan Central Railway and new Power House site was vigorously pressed during the winter so that early in the season cars were running over the new route and direct connection had been secured between the steam line and the track along the foot of the escarpment.

An agreement covering a temporary and also a permanent diversion of the International Railway Company's track near Smeaton's curve was also concluded and the necessary work carried out during the winter by the Commission's forces.

LABORATORIES DEPARTMENT

The functions of this department have been fully explained in previous reports. No extension has been made during the present year to these functions, but a considerable increase in the volume of testing and investigation has taken place during the past year.

Among the points specifically mentioned in the reports of the various sections below, the following are worthy of special attention:

The large increase in commercial work carried on by this department for parties outside the Commission. This work has included efficiency tests on motors, generators, etc., repairs to and calibration of meters of all kinds, precise electrical measurements of conductivity, etc.

The larger number of field tests made by the Laboratory staff for the Engineering Department. These tests were chiefly electrical, but several tests involving thermodynamic and hydraulic equipment were made.

The extension of the inspection work to engineering materials, such as line hardware, steel for power-house structures, penstocks, etc.

The application of laboratory methods to concrete inspection in the field.

The testing of automobile headlight lenses for the Provincial Government.

Comparatively few additions have been made to the equipment during the year. The most important item added was a Corona voltmeter designed to measure voltages as high as 300,000. This device is intended to replace the sphere-gaps and needle-gaps for the measurement of high voltages, as these devices have been

found to be not entirely satisfactory for this purpose. This piece of equipment is now practically completed and the preliminary tests indicate that it will be entirely satisfactory and will be a valuable addition to the testing equipment.

The work of the various sections is described more fully below.

High Tension and General Testing Laboratory

Previous reports have outlined the general activities of this laboratory and have listed various items of equipment which are essential to its work, hence it is not necessary to enumerate the various items in detail nor to recount the routine tests which have become standard practice.

In a general way we may say that this laboratory is prepared to undertake practical electrical tests, studies or investigations of almost any range. Tests which have become standard practice are systematized and treated as routine for economy of operation as well as for proper comparison of results. Frequently, however, special tests are required to clear up some doubtful phenomena and the final results are usually of sufficient importance to be dignified by the name of an investigation.

Routine electrical tests are made on many classes of apparatus and materials. The various commercial tests are made on constant-potential and constant-current transformers, alternating and direct-current generators and motors along the lines mentioned in previous reports with the added advantage of equipment especially suited for this class of work. The testing of oil for dielectric strength is a routine test, important not only because all the high tension transformers and oil-breakers are thus looked after, but also because approximately seventy samples per month are received from various municipal stations. High tension insulator investigation is also an important routine test, though its development and the various methods of line construction warrants its mention as a special line of investigation also. Apparatus is available from which any single-phase voltage up to 200,000 volts at 25 cycles or 400,000 volts at 60 cycles may be obtained and a great deal of work is done at 110,000 volts and higher.

The monthly testing and inspection of linemen's rubber gloves has become standard practice as outlined by the Committee on Accident Prevention. These tests are made to ensure the safety of linemen and others when it is found necessary to work on line apparatus and a record is kept of the life history of each glove used for this purpose.

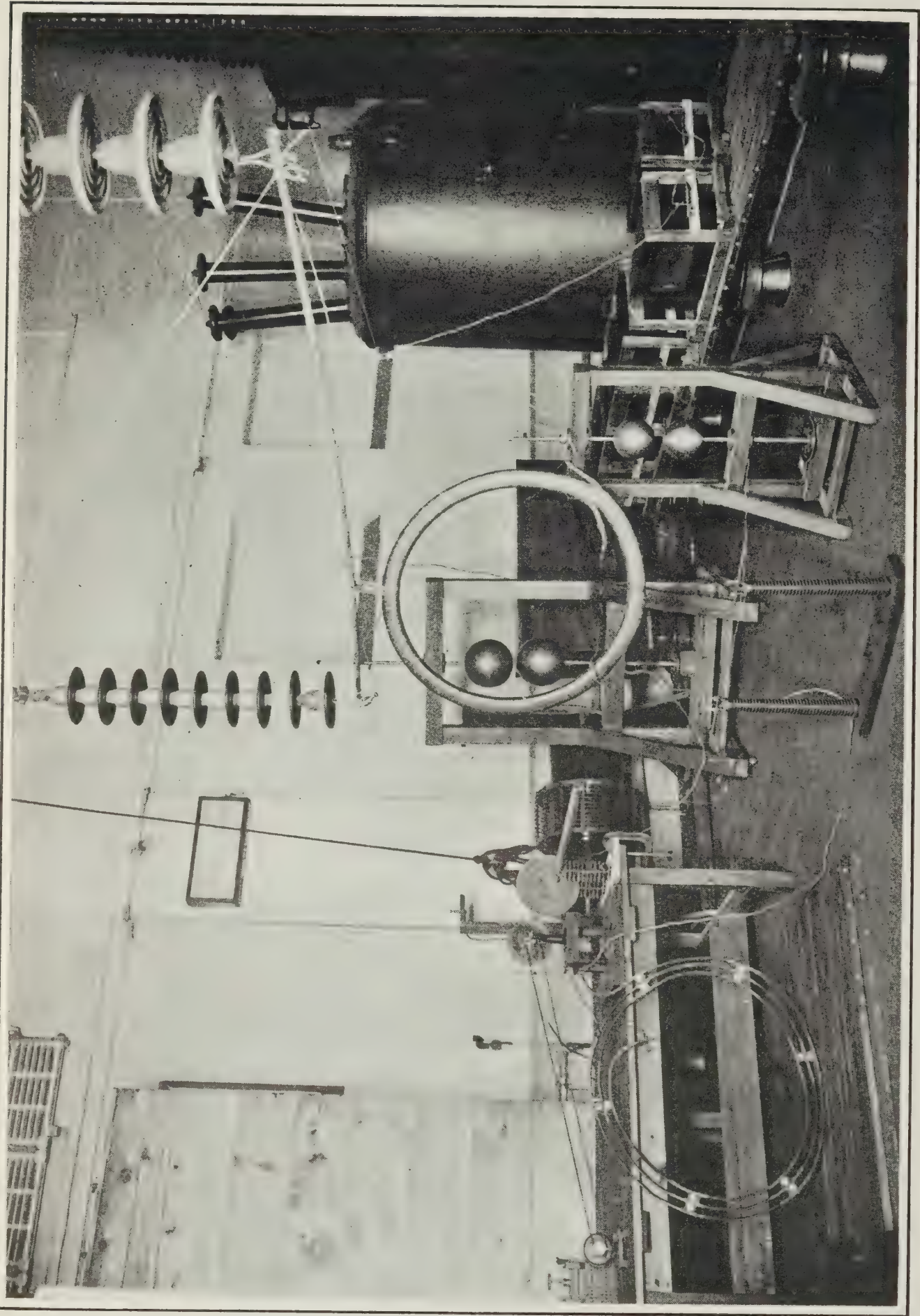
Among the various classes of work done in a regular way are—the measurement of load distribution in mills and factories, checking the suitability of application of special electrical apparatus to various uses, inspection and testing of electrical equipment required by the Construction Department, testing for manufacturers with a view to improvement in certain lines of their product.

Special problems have been studied, suitable tests made and reported on during the year among which are the following:—

The testing of cutouts for distribution transformers with a view to the selection or development of the best possible equipment for the purpose.

The analysis and compilation of test and theoretical data on the subject of interference between power lines and communication circuits.

The study of the operating characteristics of equipment for new developments to eliminate the possibility of trouble from any cause.



High Frequency test on a Transformer Coil in the High Tension Laboratory.

The development of a method and the testing of insulation in certain pieces of equipment by high voltage and high frequency. These tests required that much more energy be available at the given frequency and voltage than the capacity of the more common apparatus will supply.

Progress in the development of test methods for insulators in situ, for current transformers in situ, and analysis of the accuracy of the methods.

Inspection, test and analysis of faults in equipment with determination of the limitations under which it should operate. Typical subjects covered include storage batteries, current transformers, protective relays.

Current carrying capacity of transmission line conductors as affected by various atmospheric conditions, e.g., wind blowing, rain, etc.

Special tests on the physical properties of switch and transformer oils.

Line and load calculations on systems for the purpose of efficient location of substations and transformers.

Tests on the natural period of vibration of bus-bars to improve the safety-factor of bus construction.

The checking of theoretical studies by tests on the forces acting between bus-bars and bends in the same for the purpose of fixing the rules of design in station construction.

Assistance in the tests for overall efficiency of complete units, hydraulic and electrical, in generating stations. This work, systematically and regularly carried out, will give accurate information on the depreciation occurring in various parts of the equipment.

The construction of a Corona volt-meter of 300,000-volt rating to aid in the study of high tension line properties and phenomena.

This laboratory acts in a liaison capacity as far as possible between the fields of the so-called pure and applied sciences such as are required by the various activities of the Commission. The result of such a position is to throw much light on the problems of advanced engineering practice.

Approval Laboratory

The chief new development in the work of the approval section of the laboratories during the past year has been the increased interest in the work of the laboratory and the Approval Committee by other inspection authorities. The Underwriters' Laboratories have agreed to co-operate with the Commission in the maintenance of the standards and the elimination of fire and accident hazards, and have placed at our disposal their facilities in Chicago and New York for making tests requiring equipment which we are at present unable to secure in the Toronto Laboratories. We have already accepted this offer, and will shortly undertake a series of short-circuit tests on enclosed cartridge and plug fuses at the West Side battery station in Chicago. At the present time there is not available in Toronto a suitable storage battery of this large capacity—10,000 amperes at 600 volts.

The installation of two 160 ampere 250-volt resistance loads arranged to be operated in 1/2 ampere steps, which are now on order and whose delivery is expected at an early date, will provide means of making service tests on switches of the larger types up to 200 amperes at 250 volts, or 100 amperes at 500 volts. These tests are usually made with direct current, and it is proposed to use these resistance loads at one of the substations in the downtown section of the city, where such d. c. supply can readily be obtained.



Electrical Standards Room, showing Standard Instruments in place

As a measure of safety in making the routine insulation tests at voltages up to 4,000 V., a testing cabinet has been constructed and will shortly be equipped with automatic doors, so that the operator will not come into contact with the high voltage leads. At the present time rubber gloves are used, but the automatic switch cutting off all power to the cabinet with opening of the door is considered the more desirable.

The specification for electric washing machines has been completed and will be put into effect December 1st, 1920. Regulations have also been issued in the form of Laboratory Bulletins covering approval of switch plates, electric signs, stage lightning fixtures, cutout boxes and special metal enclosures, during the past year. Other specifications are also nearing completion, and, it is hoped, will be ready for distribution in the near future.

In this connection it might be mentioned that the laboratory engineers have been co-operating with the Canadian Engineering Standards Association in the matter of gathering opinions regarding the proposal to issue a Canadian National Electrical Code.

At the present time English manufacturers claim that they are at a disadvantage as compared with American manufacturers in Canadian markets, and they are, therefore, agitating for modifications of the present standards, or at least an opportunity to submit their goods for consideration to a Canadian rather than an American laboratory for inspection and approval. Several manufacturers, through the British Trade Commissioner, have therefore submitted samples of their goods for our inspection and comment, although none have yet applied definitely for approval. The matter of factory inspection in England will need further consideration before lines such as conduit or wire are approved. A special report, however, is being made on British-made conduit in regard to its suitability for use in this country. Comparisons have been drawn with our standards for conduit and metal raceways, and the report will deal with the types which might prove acceptable for use under our present regulations.

The system of checking all electrical goods, whether approved by other authorities or not, has been continued and enlarged. A large number of manufacturers have already complied with the regulations, and their goods are now listed either on white cards when approved by this laboratory, or on green cards when approved by the Underwriters' laboratories. The number of approval reports completed by the laboratory during the year was 105. The publication of the approval regulation notice in the most important electrical and allied trades papers was undertaken during the months of May and June, while several circular letters were also issued to the trade on this subject.

Chemical Laboratory

The work of the chemical laboratory does not change much from year to year. It increases slowly in both volume and scope, and the service it is rendering to the Commission is being found increasingly valuable.

Special attention has been given during the past year to lubricants and lubrication. Oils have been tested and analyzed, and the tests correlated with the results the same oils are giving in service. Much data has thus been collected, and specifications based on this information are now in preparation.

The chemical laboratory has successfully carried out a number of manufacturing operations for the Commission—2,660 lamps have been frosted; solder-



Equipment used for making tests on Automobile Headlights for the Provincial Government
Department of Highways.

ing paste, soft soap and certain office supplies have been made up in quantities. This work could be much increased, but since the primary purpose of the chemical laboratory is research and testing, no serious attempt has been made to develop this field.

Paints have received further attention this past year, and an interesting series of tests on concrete paints for both interior and outdoor service has been carried out. A similar series on iron and steel paints is in preparation.

The chemical laboratory is equipped to make analyses of all classes of materials. It regularly tests cement and cement materials, coal, coke, steel and other metals, rubber, oils, paints, water, special preparations, etc. Its equipment is very complete, and the work can be handled expeditiously.

Structural Materials Laboratory

The routine testing of concrete and concrete materials, cement, sand and stone, has been steadily increasing in volume. Over six hundred cement tests alone have been handled in the last year. The cement laboratory as now equipped can make one hundred tests per week. This capacity is being more than doubled in anticipation of the requirements next summer of the Niagara Power Development.

In last year's report we described the results which had been obtained from certain research work on concrete. This work has been continued throughout the year with satisfactory results.

Further work has been carried out on simplifying the present methods of determining surface area of sands and judging the concrete making properties of concrete materials. A very successful formula for determining under many conditions the proper quantity of water for concrete mixture has been developed experimentally. Studies are being carried out on the "yield" of concrete obtainable from different mixtures of cement aggregate and water, with a view to determining the relative economy of mixtures.

The method of proportioning developed as a result of this investigational work has been used all summer on the Nipigon Development, where approximately 35,000 cubic yds. of concrete have been placed. Our experience there has demonstrated its practicability and success.

Two reports describing some of the results of this investigational work on concrete have been prepared and published as bulletins of the Commission. These are being distributed to those interested.

Inspection of Engineering Materials

This work divides itself into inspection of concrete and concrete materials, inspection of steel and other metals, and shop inspection of structural fabrication.

Cement shipments are regularly inspected and sampled at the cement mills prior to shipment by representatives of the laboratory. This is a part of the regular service of the laboratory for any construction work for which cement tests are made.

Deposits of sand and gravel from which the Commission intends to obtain supplies for concrete are inspected by laboratory engineers, samples taken for test and reports made upon their economic features.

Where the quantities of concrete being placed justify the expense, inspecting engineers from the laboratory are sent out. They become for the time being members of the field organization to which they are assigned. Their duties are to inspect the materials, the processes and plant used, set the proportions, take samples, etc. This arrangement was carried out this summer for the Nipigon Development.

Inspection of steel and steel products comprises mill inspection and testing of samples of materials such as concrete reinforcing bars, rails, pipes, special forgings and castings, etc. A large tonnage of this class of material has been handled in the past year, the principal items of which are 5,000 tons of reinforcing steel and 30,000 feet of pipe.

Shop inspection of the superstructure of the Nipigon powerhouse was completed during the year. Similar inspection was made on a bascule highway bridge and on a number of smaller items, tanks, transformer trucks, steel concrete forms, screen racks, etc. A great deal of this work is in hand for the immediate future.

Field Laboratories

A field laboratory was established at Nipigon during the past summer. This was equipped to make the tests on concretes and aggregates necessary in carrying out the method of proportioning used there. The laboratory proved a great convenience, and the plan is to be extended to other work.

By arrangement with one of the manufacturers of cement a temporary laboratory was installed at one of their mills, which was too far from Toronto for the work there to be handled expeditiously from here. The inspection and testing of approximately 20,000 barrels of cement was handled through this laboratory.

Meter and Standards Laboratory

The operations of this section during the past year have continued along much the same lines as in previous years. No great changes have been made in the layout or construction of the equipment. It has been found possible to get many of the tests down to a more or less routine basis, thus enabling great savings of time to be accomplished. Much standardization of instruments has been done, both on laboratory meters and apparatus brought in by outside parties. The standardization work has also been so co-ordinated with the repair, that damaged instruments can receive attention and be prepared for calibration without delay. There has been a noticeable increase in the number of indicating instruments being sent in for repair or calibration by outside parties, these including municipalities, private concerns and manufacturing corporations.

For some years there has been under way a detailed investigation of demand meters, with the object of determining the true status of the various types of devices of this class as sources of valuable information in the measurement of actual industrial and commercial loads. This investigation has been completed, and a very full report of the work prepared. The conclusions of this report would tend to show that the demand meter, though it cannot be considered as a precision instrument, is capable of giving very valuable information in a simple form. Different types of demand meters are likely to put differing interpretations upon similar load conditions; and, considering the number of uncontrollable variables which enter into the measurement, it is unnecessary to lay great stress upon the time period used.

A considerable number of oscillograph investigations have been made. Some very valuable tests were made upon a new generator being put into service in one of the power houses, showing operation under various short-circuit conditions, and demonstrating the action of the automatic voltage regulators. In connection with an extensive series of tests which were being run on transformer primary cut-outs, a large number of oscillograms were made, and show the operating characteristics of the different types tested. It has been possible also to co-operate with engineers who were carrying out investigations of the possibilities of high frequency telephony in connection with power systems, and, by means of the oscillograph, to gain some very interesting information.

A number of tests requiring special methods of measurement have been made during the year. Among these may be mentioned: Measurement of the inductance of transformer coils; dielectric strength of fire extinguisher fluids; magnetic characteristics of telephone transformers at low flux densities.

Tests have been carried out on various new types of apparatus which the Commission has contemplated using at its stations or elsewhere. Among these are graphic meters, demand indicators, temperature recorders and general testing apparatus. A complete re-design has been accomplished upon an electrostatic voltmeter used in the laboratories, making it much more flexible and generally increasing its sphere of usefulness.

The revision of the specification of acceptance tests for watt-hour meters has been carried out, and is now practically complete. In this connection there have also been drawn up a series of specifications for the purchase of watt-hour meters, which are intended to apply to the purchase by the Commission of apparatus of this class. The testing of street lighting relays built by another Department has been carried out systematically, so that an assurance is obtained that these are up to specification before they are taken into stock. It has been found possible to co-operate with the Stores Department in the examination, repair and modification for special work of watt-hour meters carried in stock.

The systematic repair and readjustment of watt-hour meters for small municipalities has been carried on; and though this work showed a decided slump during the period of power shortage, a noticeable revival is now in evidence. Much of the Dominion Government inspection of watt-hour meters for the Toronto district is carried on in this Department by the Inspectors of the Department of Weights and Measures, who visit the laboratories when shipments of meters are ready to go out, and test them on the boards in the meter shop, thus avoiding the duplication of time and energy. In several cases it has been found feasible to send a member of the staff to a municipality to proceed with the adjustment of old meters for re-verification by the Inspectors.

Much routine work has been done upon commercial metering devices, including demand meters, graphic instruments, switchboard meters, insulation testing sets, rail bond testers, instrument transformers and portable meters. This work includes re-winding, repairing, cleaning, adjusting and general overhauling.

The work of the instrument shop, under the jurisdiction of this section, has continued to be of great value to the laboratories. A number of special testing devices for various departments have been constructed, and it has been possible to keep in good condition such pieces of apparatus as are subject to deterioration in use or to accident.

Photometric Laboratory

During the past year the regular work of this section of the laboratories has been carried on as in former years, and in addition some unusual tests have been completed that serve as an indication of the scope of the work and the variety of testing that the laboratory is prepared to undertake.

The routine tests of lamps include examination of the lamps for mechanical defects, tests for physical and electrical defects, measurement of initial rating and life performance. As in former years, a good proportion of these tests have been of a commercial nature for parties outside the Commission. Tests of lamps for special purposes have been made, such as low voltage and train-lighting lamps. It was found necessary to install an extension to the rack for life-testing series lamps.

Tests were made of motion picture projectors with specially designed gas-filled tungsten lamps and optical equipment. These tests included the projection of pictures and measurements of screen illumination and the angular distribution of brightness of plain cotton and metallic-coated screens. These tests showed that the tungsten lamps produced very superior results to the commonly used arc lamps on alternating current and at a very great saving in current. The results of these tests are important to the smaller municipalities, as they show that a motion picture theatre can be profitably operated with tungsten lamp projection where the arc would be a considerable proportion of the town load, resulting in an excessively high rate.

This department co-operated with representatives of the Provincial Government in deciding upon the limits to be placed upon the use of automobile headlights in the Province. The necessary apparatus for making the tests of headlight devices was designed in the department, and the testing of such devices has become part of the regular work of the laboratory. One hundred and ninety-five complete tests of headlight devices have been made, as well as many supplementary tests on details requiring special attention. For this work the necessary standard lamps used in the head-lamps were standardized and maintained in the laboratory.

This section is also co-operating with the Physics Department of the University of Toronto in research work on gas-filled lamps.

An increased number of distribution tests of lighting units have been made. Some illumination measurements were made of competitive samples of train-lighting glassware.

Some work was done in connection with the drafting of lamp specifications as proposed by the Sub-Committee on Lamp Specifications of the Canadian Engineering Standards Association.

The department has co-operated with other departments of the Commission on various illumination problems.

A photometric device was constructed for measuring the diffusing characteristics of transmitting media, such as opal and frosted lamp bulbs and globes, as well as sheet glass.

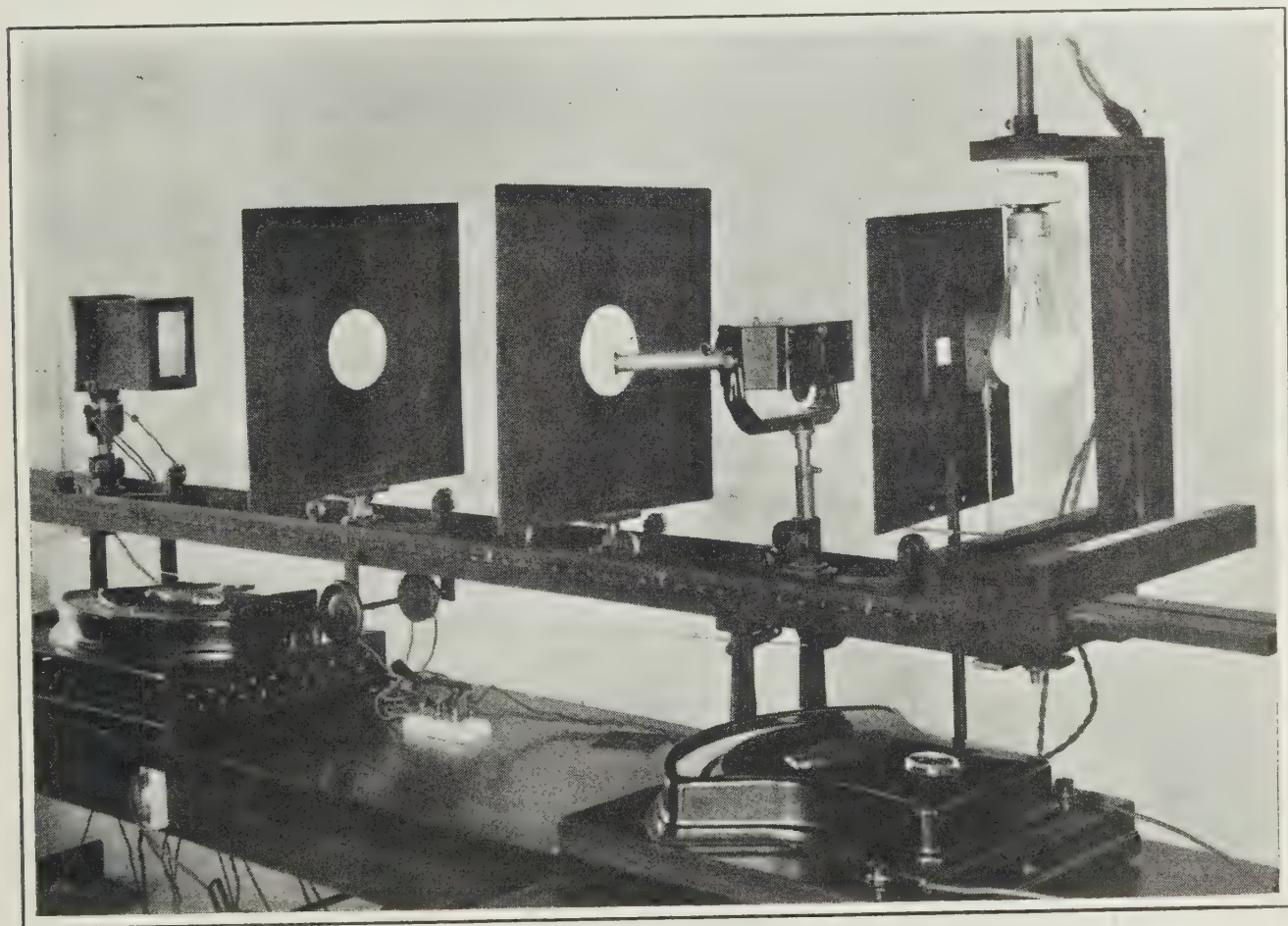
A few changes have been made to the photometers to facilitate the rapid handling of lamps and the lessening of the clerical work necessary in compiling the test results.

Photographic Section

This section has been kept pretty busy during the past year, during which time over 14,000 prints have been made from blue prints and other copies sent in from negatives in the laboratory, and from pictures taken in the field by the Engineering Staff and by the Photographic Staff. Lantern slides to the number of 271 were made, and 20 enlargements.

Trips were made to the Big Chute, High Falls, Healey Falls, Ranney's Falls, Eugenia and Nipigon Generating Stations, and monthly trips to Niagara Falls, where progress pictures were made of the Ontario Power Co.'s pipe line No. 3, and work on the Chippawa-Queenton Canal and power-house excavations.

During 1919 a blue printing department was added, with 1 mercury vapor printing machine and an electric drier, which started operation on October 27th, and handled 1,717 orders for vandyke negatives, white and blue line prints on paper and linen, and blue prints from 1 to 500 on a single order.



Measuring the diffusion of light from a Frosted Lamp—Photometric Laboratory.

LIBRARY

The Library was started in 1916 to meet a need that began to become pressing at that time, namely, the proper classification and care of the various technical papers, periodicals, books, reports, etc., having a more or less permanent value, but which could no longer be taken care of adequately under the general filing system.

At the present time there are some 2,700 volumes in the Library, covering a wide range of subjects of direct interest to the various departments of the Commission, amongst them many important Government reports, pamphlets, etc., all of which are classified under the Dewey Decimal System.

There are some seventy periodicals subscribed for through the Library, and routed to the various departments interested, after which they are returned and ultimately bound in annual volumes.

The expenditure for the past year on books, periodicals, binding reports, etc., amounted to approximately \$1,125, which includes a number of books on permanent loan to departments exclusively interested in them.

It is on record that books have been borrowed 4,300 times since the latter part of 1917, not to mention casual references of which no record is kept. This, together with the undoubted service in handling periodicals, goes to show that the Library is performing in a useful manner the functions for which it was intended.

This is even further evidenced by its healthy growth from a mere heterogeneous collection of books and pamphlets in 1916 to the well organized library of 2,700 odd volumes that it is now.

This growth, in keeping as it is with that of the Commission's activities as a whole, will necessitate before long the provision of room for expansion, which should be taken into account in any comprehensive plans which may be considered for increasing the accommodation of the Administrative Office Staff.

Table No. 1

CAPACITIES OF TRANSFORMERS INSTALLED OR ORDERED FOR COMMISSION'S STATIONS

Total Capacity, 849,445 Kv-a.

The following list includes spares, but does not include Station Service Transformers

Station	Voltage	Transformers Installed		Transformers on Order		Total Station Kv-a.	System Capacity Kv-a.
		Mfr.	Kv-a.	Mfr.	Kv-a.		
QUEENSTON-CHIPPAWA DEVELOPMENT.							
(Construction Stations.)							
Montrose Sub-Station	25 Cycles 12,000—4,000 12,000—440 4,000—550	C.G.E.Co. G.E.Co.	3,000 990	C.C.W.Co.	1,500	.....	.....
Whirlpool	12,000—4,000	C.G.E.Co.	4,500	M.E.Co.	1,800	.....	.....
	4,000—575	M.E.Co.	2,400	.....	.....	7,290	.....
	12,000—440	C.G.E.Co.	3,310	.....	.....	10,210	.....
Queenston Generating Station	12,000—110,000	.....	.....	C.W.Co.	225,000	225,000	17,500
NIAGARA SYSTEM.							
(1) Niagara Transformer Station	25 Cycles 12,000—110,000 12,000—46,000	C.W.Co. C.G.E.Co.	167,000 35,000	.....	.....	.....	.....
(2) Dundas Transformer Station	110,000—13,200	C.G.E.Co.	17,500	.....	.....	202,000	.....
Caledonia Dist. Station	13,200—2,300	P.T.Co.	450	.....	.....	17,500	.....
Waterdown	13,200—2,300	C.C.W.Co.	225	.....	.....	450	.....
Hagersville	13,200—4,000	C.W.Co.	225	.....	.....	225	.....
Lynden	13,200—4,000	C.W.Co.	225	.....	.....	225	.....
(3) Toronto Transformer Station	110,000—13,200	C.G.E.Co.	75,000	.....	.....	75,000	.....
(4) London Transformer Station	110,000—13,200	C.G.E.Co.	17,500	.....	.....	17,500	.....
Dorchester Dist. Station	13,200—4,000	C.W.Co.	225	.....	.....	225	.....
Lucan	13,200—4,000	C.G.E.Co.	225	.....	.....	225	.....
Delaware	13,200—4,000	P.E.Co.	75	.....	.....	75	.....
Exeter	13,200—4,000	C.G.E.Co.	300	.....	.....	300	.....
Ailsa Craig	13,200—4,000	C.W.Co.	225	.....	.....	225	.....
Guelph Transformer Station	110,000—13,200	C.G.E.Co.	5,000	.....	.....	5,000	.....
Acton Dist. Station	13,200—2,300	C.W.Co.	225	.....	.....	225	.....
Georgetown Dist. Station	13,200—4,000	C.G.E.Co.	450	.....	.....	450	.....
Rockwood	13,200—2,300	C.G.E.Co.	75	.....	.....	75	.....
Cheltenham	13,200—575	C.G.E.Co.	225	.....	.....	225	.....

Table No. 1—Continued
CAPACITIES OF TRANSFORMERS INSTALLED OR ORDERED FOR COMMISSION'S STATIONS—Continued
Total Capacity, 849,445 Kv-a.

Station	Voltage	Transformers Installed		Transformers on Order		Total Station Kv-a.	System Capacity Kv-a.
		Mfr.	Kv-a.	Mfr.	Kv-a.		
Fergus Dist. Station	13,200—	C.G.E.Co.	225	.....	.....	225	
Elora	13,200—	C.W.Co.	225	.....	.....	225	
(6) Preston Transformer Station	110,000—	C.G.E.Co.	3,000	.....	.....	.....
South Waterloo Twp. Distributing Station	110,000—	C.G.E.Co.	2,250	.....	.....	5,250	
	6,600—	C.G.E.Co.	60	.....	.....	60	
(7) Kitchener Transforming Station	110,000	C.G.E.Co.	6,750	C.G.E.Co.	10,000	16,750	
New Hamburg Dist. Station	13,200—	P.E.Co.	225	.....	.....	225	
Baden	13,200—	C.C.W.Co.	450	.....	.....	450	
Elmira	13,200—	C.G.E.Co.	450	.....	.....	450	
St. Jacobs	13,200—	M.E.Co.	75	.....	.....	75	
(8) Stratford Transformer Station	110,000—	C.W.Co.	5,000	.....	.....	5,000	
Listowel Dist. Station	26,400—	C.W.Co.	300	.....	.....	.....
Harriston Dist. Station	26,400—	C.G.E.Co.	600	.....	.....	900	
Tavistock	26,400—	C.G.E.Co.	225	.....	.....	225	
Milverton	26,400—	C.C.W.Co.	225	.....	.....	225	
Palmerston	26,400—	C.G.E.Co.	225	.....	.....	225	
Dublin	26,400—	C.G.E.Co.	225	.....	.....	225	
(9) St. Mary's Transformer Station	110,000—	M.E.Co.	50	.....	.....	50	
St. Mary's Cement Dist. Station	13,200—	C.G.E.Co.	3,000	.....	.....	3,000	
Woodstock Transformer Station	13,200—	C.G.E.Co.	1,500	.....	.....	.....
Beachville Dist. Station	110,000—	P.E.Co.	450	.....	.....	1,950	
Norwich	13,200—	C.G.E.Co.	6,000	.....	.....	6,000	
Embro	13,200—	C.G.E.Co.	225	.....	.....	225	
(10) St. Thomas Transformer Station	13,200—	P.E.Co.	225	.....	.....	225	
Aylmer Dist. Station	110,000—	P.E.Co.	50	.....	.....	50	
Port Stanley	13,200—	C.G.E.Co.	5,250	.....	.....	.....
Dutton	13,200—	C.W.Co.	150	.....	.....	5,250	
West Lorne	13,200—	S.Co. of C.	225	.....	.....	150	
Brant Transformer Station	13,200—	C.W.Co.	225	.....	.....	225	
	110,000—	C.W.Co.	225	.....	.....	225	
	110,000—	C.W.Co.	10,000	.....	.....	10,000	

Table No. 1.—Continued.
CAPACITIES OF TRANSFORMERS INSTALLED OR ORDERED FOR COMMISSION'S STATIONS—Continued
Total Capacity 849,445 Kv-a

Station	Voltage	Transformers Installed		Transformers on Order		Total Station Kv-a.	System capacity Kv-a.
		Mfr.	Kv-a.	Mfr.	Kv-a.		
EUGENIA SYSTEM.							
Eugenia Generating Station	60-Cycles 4,000—22,000	C.W.Co.	5,400	.....	.....	5,400	
Owen Sound Dist. Station	22,000—2,300	C.W.Co.	1,650	.....	.....	1,650	
Chatsworth	22,000—4,000	C.G.E.Co.	75	.....	.....	75	
Chesley	22,000—4,000	C.G.E.Co.	300	.....	.....	300	
Durham	22,000—4,000	C.G.E.Co.	150	.....	.....	150	
Durham Cement Dist. Station	22,000—2,300	C.G.E.Co.	1,200	.....	.....	.....
Mount Forest	22,000—4,000	C.G.E.Co.	300	.....	.....	300	
Shelburne	22,000—4,000	M.E.Co.	150	.....	.....	150	
Grand Valley	23,000—4,000	C.G.E.Co.	150	.....	.....	150	
Orangeville	22,000—4,000	M.E.Co.	450	.....	.....	450	
Kilsyth	22,000—4,000	M.E.Co.	75	.....	.....	75	
Elmwood	22,000—4,000	M.E.Co.	50	.....	.....	50	
Hanover No. 1	22,000—2,300	P.E.Co.	750	.....	.....	.....
Priceville	22,000—2,200	P.E.Co.	750	.....	.....	1,500	
		G.E.Co.	*20	.....	.....	20	10,270
BRUCE COUNTY SYSTEM.							
Wingham Dist. Station	22,000—2,300	C.G.E.Co.	*750	.....	.....	750	
Holyrood	23,000—2,200	C.W.Co.	*300	.....	.....	300	
Teeswater	22,000—2,200	C.G.E.Co.	*150	.....	.....	150	
Kincardine	22,000—2,200	C.W.Co.	*375	.....	.....	375	
SEVERN SYSTEM.							
Big Chute Generating Station	60-Cycles 2,200—22,000	C.W.Co.	3,600	.....	.....	.....	1,575
Penetanguishene Dist. Station	22,000—2,200	C.C.W.Co.	600	.....	.....	4,200	
Barrie	22,000—2,300	C.G.E.Co.	600	.....	.....	600	
Collingwood Dist. Station	22,000—2,300	C.G.E.Co.	700	.....	.....	700	
Coldwater	22,000—2,300	C.G.E.Co.	1,200	.....	.....	1,200	
Elmvale	22,000—2,300	M.E.Co.	50	.....	.....	50	
Stayner	22,000—2,300	C.W.Co.	225	.....	.....	225	
Port McNicoll Dist. Station	22,000—4,000	C.W.Co.	300	.....	.....	300	
C.P.R., Pt. McNicoll Dist. Station	22,000—2,300	C.G.E.Co.	50	.....	.....	50	
	22,000—575	C.G.E.Co.	1,500	.....	.....	1,500	

Waubausheene Dist. Station.....	22,000—	2,300	C. G. E. Co.	50	.....	50
Midland “ “	22,000—	2,300	M.E. Co.	900	.....	900
Alliston “ “	22,000—	4,600	Packard Co.	225	.....	345
Beeton “ “	22,000—	4,000	M.E. Co.	75	.....	75
Thornton “ “	22,000—	4,000	M.E. Co.	25	.....	25
Tottenham “ “	22,000—	4,000	M.E. Co.	75	.....	75
Cookstown “ “	22,000—	4,000	C. G. E. Co.	75	.....	75
Bradford “ “	22,000—	575	M.E. Co.	300	.....	.....
“ “	575—	2,300	C. G. E. Co.	45	.....	345
10,715						
WASDELL'S SYSTEM.						
Wasdell's Falls Generating Station	60-Cycles					
Beaverton Dist. Station	2,300—	22,000	C. W. Co.	1,050	.....	1,050
Cannington “ “	22,000—	4,000	C. W. Co.	300	.....	300
Kirkfield Crushed Stone Distributing Station	22,000—	4,000	C. W. Co.	300	.....	300
“ “	22,000—	4,000	P. E. Co.	225	.....	.....
“ “	4,000—	550	M.E. Co.	30	.....	255
1,905						
St. LAWRENCE SYSTEM.						
Cornwall Transformer Station	110,000—	26,400	C. G. E. Co.	5,000	.....	5,000
Prescott Dist. Station	26,400—	2,300	C. G. E. Co.	450	.....	450
Winchester “ “	26,400—	2,300	C. G. E. Co.	150	.....	150
Chesterville “ “	26,400—	4,000	C. G. E. Co.	300	.....	300
Cornwall Toronto Paper Co., Dist. Station	26,400—	600	C. G. E. Co.	750	.....	2,250
Brockville Distributing Station	26,400—	2,300	C. G. E. Co.	1,500	.....	1,500
Williamsburgh “ “	44,000—	2,400	.....	.....	.....	50
Apple Hill “ “	44,000—	4,160	.....	.....	.....	300
Alexandria “ “	44,000—	4,160	.....	.....	.....	300
10,300						
CENTRAL ONTARIO SYSTEM.						
Generating Stations—						
Fenelon Falls	2,400—	44,000	C. G. E. Co.	750	.....	.....
Auburn	600—	11,000	C. G. E. Co.	945	.....	1,695
Healey Falls	6,600—	44,000	C. G. E. Co.	3,750	.....	.....
Stephens Dam	2,400—	6,600	C. G. E. Co.	600	.....	4,350
Sidney No. 2	6,600—	44,000	C. W. Co.	11,250	.....	11,250
“ “	2,400—	44,000	C. W. Co.	4,500	.....	4,500
“ “	6,600—	44,000	C. W. Co.	9,000	.....	9,000
30,795						
Sub-Stations—						
Northumberland Pulp Mill	44,000—	2,400	C. W. Co.	2,250	.....	2,250
Delora	44,000—	600	C. W. Co.	750	.....	750
Madoc	44,000—	4,160	C. G. E. Co.	900	.....	900

*Being transferred to this station—not yet in service.

Table No. 1—Continued
CAPACITIES OF TRANSFORMERS INSTALLED OR ORDERED FOR COMMISSION'S STATIONS—Continued
Total Capacity, 849,445 Kv-a.

Station	Voltage	Transformers Installed		Transformers on Order		Total Station Kv-a.	System Capacity Kv-a.
		Mfr.	Kv-a.	Mfr.	Kv-a.		
Sulphide	44,000—	{	4,160	C.C.W.Co.	480	.....	.....
Lehigh Cement	44,000—		600	C.G.E.Co.	750	1,230	1,230
Point Anne Quarries	44,000—		600	C.G.E.Co.	3,000	3,000	3,000
Belleville Portland Cement	44,000—		600	C.G.E.Co.	600	600	600
Belleville	44,000—		600	C.G.E.Co.	2,250	2,250	2,250
Brighton	44,000—		2,400	U.G.E.Co.	2,250	2,250	2,250
Colborne	44,000—		2,400	C.G.E.Co.	300	300	300
Newcastle	44,000—		2,400	C.G.E.Co.	100	100	100
Bowmanville	44,000—		2,400	C.G.E.Co.	100	100	100
Oshawa	44,000—		4,160	C.G.E.Co.	1,500	1,500	1,500
Port Hope	44,000—		2,400	C.G.E.Co.	3,750	5,250	5,250
Napanee	44,000—		2,400	C.G.E.Co.	1,050	1,050	1,050
Wellington	44,000—		4,160	C.G.E.Co.	600	600	600
Cobourg	44,000—		2,400	C.G.E.Co.	300	300	300
Picton	44,000—		2,400	C.G.E.Co.	600	600	600
Deseronto	44,000—		2,400	C.G.E.Co.	300	300	300
Kingston	44,000—		2,400	C.G.E.Co.	600	600	600
Millbrook	44,000—		2,400	C.G.E.Co.	2,250	2,250	2,250
Trenton	6,600—	{	4,160	C.G.E.Co.	100	100	100
Lindsay	6,600—		2,400	C.G.E.Co.	750	.....	.....
Peterboro	44,000—		2,400	C.G.E.Co.	600	1,350	1,350
Omamee	44,000—		2,400	C.G.E.Co.	1,500	.....	.....
Lakefield	44,000—		2,400	C.G.E.Co.	750	2,250	2,250
Norwood	44,000—		2,400	C.G.E.Co.	2,250	.....	.....
Marmora	44,000—		2,400	C.G.E.Co.	750	3,000	3,000
System Spare	44,000—		2,400	M.E.Co.	120	120	120
				P.E.Co.	225	225	225
				P.E.Co.	300	300	300
				M.E.Co.	50	50	50
				C.G.E.Co.	750	750	750

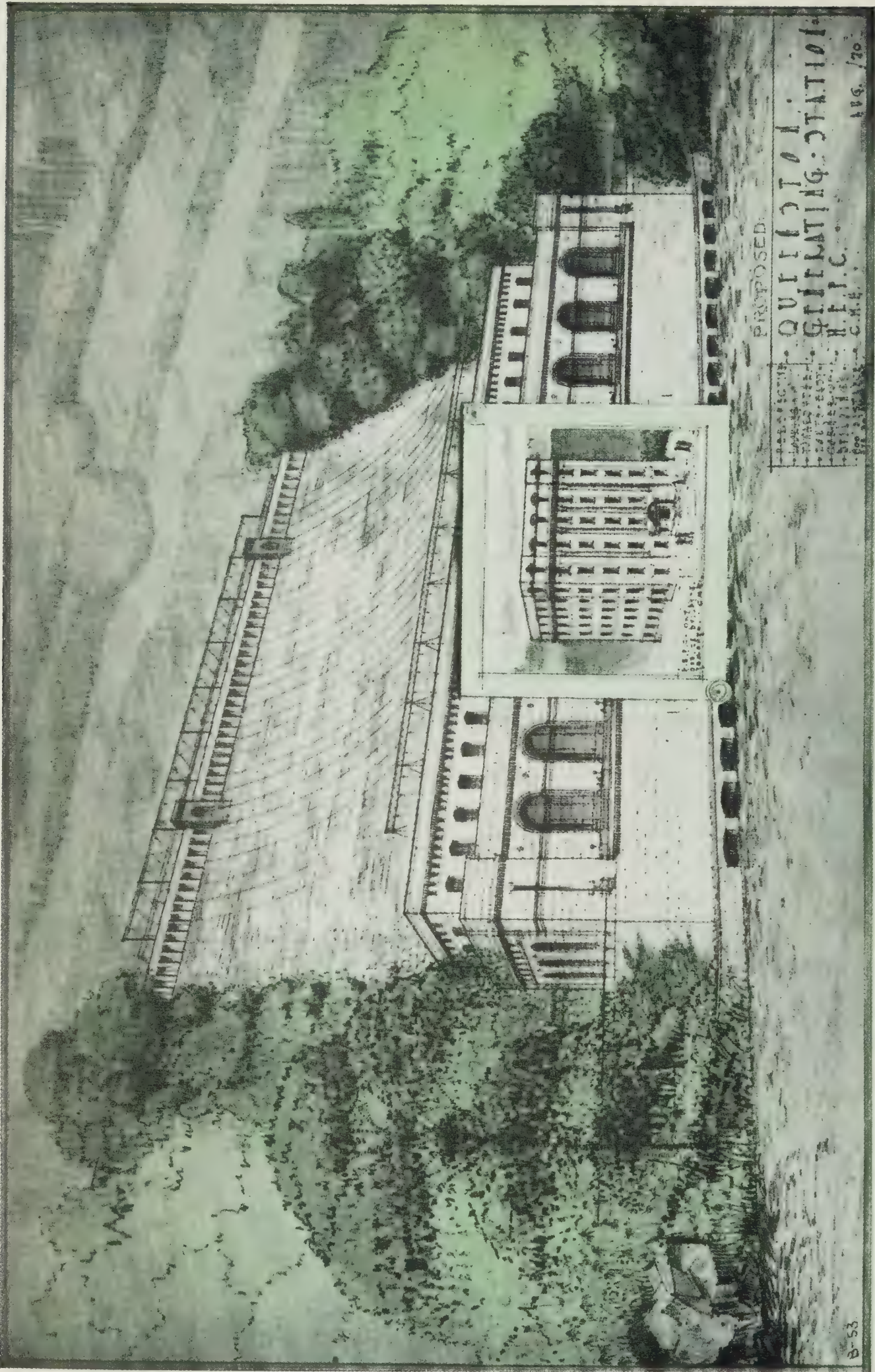
RIDEAU SYSTEM.									
High Falls Generating Station	4,160—25,400	P. E. Co.	2,250	.....	.....	2,250	5,100		
Smith's Falls Dist. Station	25,400—2,400	C. G. E. Co.	750	.....	.....	750			
Perth	25,400—2,400	C. G. E. Co.	600	.....	.....	600			
Merrickville	25,400—2,400	C. G. E. Co.	750	.....	.....	750			
Carleton Place	26,400—2,200	P. T. Co.	750	.....	.....	750			
THUNDER BAY SYSTEM.									
Nipigon Generating Station	60-Cycles	.....	.....	.....	.....	.....	53,250		
Port Arthur (Nipigon), Trans. Station..	12,000—63,500	.....	.....	.....	.....	.....
Port Arthur Dist. Station	63,500—22,000	.....	.....	.....	.....	.....
	22,000—2,200	S. Co. of C.	5,250	.....	.....	5,250			
MUSKOKA SYSTEM.									
South Falls Gen. Station	60-Cycles	.....	1,200	.....	.....	1,200	2,100		
Huntsville Dist. Station	6,600—22,000	C. G. E. Co.	900	.....	.....	900			
	22,000—2,300	C. G. E. Co.	.....	.....	.....	.....
NIPISSING SYSTEM.									
Nipissing Gen. Station	60-Cycles	.....	900	.....	.....	900	5,050		
North Bay Dist. Station	2,200—22,000	C. W. Co.	1,350	.....	.....	1,350			
Callendar	22,000—2,200	C. W. Co.	50	.....	.....	50			
Powassan	22,000—2,000	A. C. B. Co.	50	.....	.....	50			
		C. G. E. Co.	.....	.....	.....	.....

Table No. 2

STATION TRANSFORMERS ORDERED FOR MUNICIPALITIES AND COMMISSION
DURING FISCAL YEAR ENDING OCTOBER 31st, 1920

Station	Cycles	Voltage	Mfr.	No.	Kv-a. each	Total Kv-a.
NIAGARA SYSTEM.						
System Spares	25	110,000- 26,400	C.G.E.Co.	4	2,500	10,000
Niagara Falls Mun. Sta.	25	13,200- 2,300	C.C.W.Co.	1	1,500	1,500
Waterloo Mun. Station	25	26,400- 2,300	C.W.Co.	3	750	2,250
Woodstock "	25	26,400- 2,300	P.E.Co.	3	300	900
Tillsonburg "	25	26,400- 2,300	C.G.E.Co.	3	250	750
Sarnia "	25	26,400- 2,300	M.E.Co.	1	1,500	1,500
EUGENIA SYSTEM.						
Priceville	60	22,000- 2,200	G.E.Co.	2	10	20*
Hanover	60	22,000- 2,300	P.E.Co.	2	750	1,500
SEVERN SYSTEM.						
Alliston Dist. Sta.	60	22,000- 2,300	P.E.Co.	3	75	225
BRUCE COUNTY SYSTEM.						
Wingham Dist. Station	60	22,000- 2,300	C.G.E.Co.	3	250	750*
Holyrood "	60	22,000- 2,200	C.W.Co.	3	100	300*
Teeswater "	60	22,000- 2,200	C.G.E.Co.	3	50	150*
Kincardine	60	22,000- 2,200	C.W.Co.	3	125	375*
WASDELL'S FALLS SYSTEM.						
Kirkfield Crushed Stone Dist.	60	22,000- 550	P.E.Co.	3	75	225
Station	60	4,000- 550	M.E.Co.	3	10	30
CENTRAL ONTARIO SYSTEM.						
Lakefield Dist Station	60	6,600- 2,400	P.E.Co.	3	75	225
Norwood "	60	44,000- 2,400	P.E.Co.	1	300	300
Marmora "	60	44,000- 2,400	M.E.Co.	1	50	50
ST. LAWRENCE SYSTEM.						
Williamsburg Dist. Station	60	4,400- 2,400	M.E.Co.	1	50	50
Apple Hill "	60	44,000- 2,400	P.E.Co.	1	300	300
Alexandria "	60	44,000- 2,400	P.E.Co.	1	360	300
NIPISSING SYSTEM.						
Nipigon Generating Station	60	2,300- 23,000	P.E.Co.	3	900	2,700
Queenston Gen. Station	25	12,000-110,000	C.W.Co.	15	15,000	225,000

*Transferred from Stores or other Stations.



PROPOSED
QUEENSTON
GENERATING STATION
H.E.P.C.
C.M.E.
189. / 70

QUEENSTON GENERATING STATION (PROPOSED)

This view shows an inset of the Commission's Administration Building in Toronto drawn to the same scale, thus giving a realistic impression of the vast size of this structure.

Thirteenth Annual Report

OF THE

HYDRO-ELECTRIC POWER COMMISSION

OF THE

PROVINCE OF ONTARIO

FOR THE YEAR ENDED OCTOBER 31st

1920

VOLUME II

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

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1921

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THE RYERSON PRESS.

To His Honour, THE HONOURABLE LIONEL H. CLARKE,

Lieutenant-Governor of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present to your Honour Volume I of the Thirteenth Annual Report of the Hydro-Electric Power Commission of Ontario, for the fiscal year ending October 31st, 1920.

The Annual Report for this year is submitted by the Commission with a feeling of great satisfaction in the knowledge that the results of the year's operations have been the most successful in the history of the Commission.

Throughout the year, the country has been passing through a prolonged period of readjustment, following the great war, and commercial conditions, in many parts of the Province, have, as yet, not become normal. In some of the municipalities, many industries are entirely closed down waiting for a readjustment of the cost of materials and labor before resuming normal production. This business depression mostly affected the Eugenia and Severn Systems, especially the latter, where a number of large industries have not yet commenced operating on normal lines of business, with a consequent reduction in load used by the municipalities on the Severn System, and, a corresponding reduction in load previously purchased from the Eugenia System, thereby reducing the revenue formerly obtained by that system.

The Niagara System is larger than the other systems, and the loss experienced by the dropping off of certain kinds of industries did not as seriously affect the revenue of this system, as was the case with the smaller systems, and the general growth in business in the municipalities on this system more than compensated for the loss of such industries, as were particularly affected during the readjustment period, and the general growth in business on the system was such that toward the end of the year, there was not a sufficient supply of power to meet the demand. This was due, in most part, to the expiration of a contract for a supply of a block of power assumed by the Commission at the time of purchase of the assets of the Ontario Power Company of Niagara Falls. This shortage in power supply greatly handicapped the municipalities on this system, and many of the municipalities were unable to obtain sufficient power to meet the demands of their old customers, and prevented the taking on of much new business, that under normal conditions would have been obtained.

Owing to the abnormal increase in the cost of labor and materials, it was necessary, at the beginning of the year, to increase the rates charged to a number of the smaller municipalites, on this system, but, I am pleased to report that the general increase in business, especially in the smaller municipalities, where it was necessary to make these increases, has resulted in an increase in revenue

sufficient to offset this increased cost of power, so that after meeting all operating costs, the operation of practically every municipality on the system showed a net surplus. The successful operation of the municipalities of the various systems is even more marked when it is borne in mind that the cost of labor and material was maintained at the extremely high level caused by war conditions for practically the entire year. It was only toward the end of the year that the cost of material showed any appreciable tendency to drop; the cost of labor being maintained at an unprecedented high figure throughout the entire year. While the cost of labor throughout the year did not decrease, the efficiency of labor commenced to increase very considerably about the middle of the year, which resulted in a considerable saving to every municipality supplied.

At the beginning of the year, the Commission fixed a schedule of rates to cover the estimated cost of service to all municipalities. The total revenue for the year, under these rates, was \$4,513,404.33, while the cost of service made up of the cost of power, interest, depreciation and maintenance, was \$3,946,132.91, and the necessary fixed charges and renewals, including sinking fund, reserves for renewals and contingencies amounted to \$714,735.61. After meeting all operating expenses, and setting aside the reserves, as above set out (in accordance with Section 23 of the Power Commission Act) the expenditures exceeded the revenue by \$147,464.19; the cost of service to all municipalities exceeding the estimates for the year by only 3.16 per cent., which is a very creditable showing in view of the continued high cost of labor and materials throughout the entire year. Bills and credit memoranda have been forwarded to all municipalities for the difference between the actual cost of service and the power bills, as rendered, which have already been taken up and incorporated in the books of the municipalities, so that the Commission's balance sheet shows neither "Profit" nor "Loss."

NIAGARA SYSTEM

From the beginning of the year, the loads of the various municipalities on the system began to increase considerably, owing to many factories again having resumed operations on commercial lines, after having been previously engaged in the manufacture of war munitions, which loads dropped off early in 1919. The demands of the municipalities on the system for power became so great during the year, that the Commission was unable to obtain sufficient power to meet all of its requirements during peak load hours, and, the municipalities on this account were unable to supply all of the requirements of their customers, with a consequent reduction in revenue to the Commission from the municipalities supplied, and a corresponding loss in revenue to the municipalities from the customers, whose loads it was necessary to restrict.

About the middle of the year, arrangements were made with the Canadian-Niagara Power Company, whereby the Commission obtained an additional supply of 9,000 horsepower. This additional power was of great assistance in meeting the requirements of the municipalities, although, the loads of all of the municipalities had to be restricted, especially towards the end of the year when the power and lighting peaks became coincident.

Throughout the year, the Commission has been endeavoring to arrange for an additional power supply, and, at the time of writing, a second additional block of power has been arranged for with the Canadian-Niagara Power Company, which has helped very materially in meeting the requirements of the municipalities.

Notwithstanding the severe commercial depression that has continued throughout the year, the financial operating statement for the system shows a remarkably successful financial condition in all the municipalities on the system, with regard to the operation of their own distribution systems. Out of the 127 municipalities, as shown in the operating report for this system, all have been able to meet their operating expenses, as well as to set aside a sufficient fund for depreciation, leaving, in each case, a very handsome net surplus, with the exception of seven of the smaller municipalities in which local conditions, due to the financial depression, have affected their industries, which, of course, seriously affected the revenue from their power customers, and four townships, which have been seriously handicapped through shortage of power supply during the year, owing to the fact that they have been unable to take on additional customers on their existing systems, and, in the smaller municipalities on this system, where the cost of power ranges between \$50.00 and \$85.00 per horsepower per year, the operation on their systems show, without an exception, a net surplus for the year's operation.

Queenston-Chippawa Development

During the year, work on the Queenston-Chippawa Development was carried on, as outlined in last year's Report. Considerable trouble was experienced throughout the entire year regarding the supply of common labor, the demand greatly exceeding the supply. For about three months of the year, the construction work was greatly impeded by unsettled labor conditions, and the work was completely shut down for one month on account of a strike. This resulted in a loss of over \$600,000.00 in non-productive overhead, and additional fixed charges due to delay in completion of the work, and, in order to finish the undertaking on schedule time, extra equipment had also to be purchased to compensate, as far as possible, for the time lost in the progress of the work.

During the year, the Commission has contracted for three complete additional generating units, so that the initial installation in the plant will be five units instead of two, as originally intended, which increased capacity will, it is expected, take care of the power requirements of the district for some time to come.

This development is being constructed so as to utilize the total possible head between Lake Erie and Lake Ontario, the total construction head of the plant being 305 feet. The generators are the largest units of their kind in the world, each having a capacity of 55,000 horsepower.

With the added assistance of additional equipment purchased during the year, the construction work is progressing at a very rapid rate. The electrically operated shovels are making a world's record in the removal of earth and rock which is being excavated and disposed of at a rate of one-half million cubic yards per month, and, at the present rate of progress, all the excavation work in the canal proper should be completed by the month of June, 1921.

At the time of writing, the progress on construction work is well in advance of the estimated schedule and with a continuance of this pleasing progress it is expected that the canal will be completed, and the first two generating units in operation, ready to deliver 100,000 horsepower in September, 1921. One turbine has already been erected and is ready for the assembly of the generator, which generators are so large that it is necessary to assemble them at the plant. The second turbine is now being delivered and its installation will commence at once.

The construction work of the power house is well under way, the sub-structure of the building being already completed, and the concrete walls are being poured, and work has already been commenced on the construction of the roof of the building.

EUGENIA SYSTEM

The power demands of the various municipalities supplied on this system remained practically unchanged throughout the year, although, the market for surplus power, which, during the two previous years, was sold to the Severn System, practically ceased entirely. The maintaining of demands equal to those of previous years may be considered a very creditable showing on this system, due to the fact that readjustment of industry from war to normal conditions resulted in the reduction of power loads in nearly all other localities.

During the year, the work of constructing transmission lines and stations to supply a number of additional municipalities in Bruce County has been proceeded with at a rapid pace, and the demands of these municipalities, when connected to the system, will more than compensate for the loss in the power loads supplied to the Severn System to supply industries engaged on war work during the past two years, and, these additional loads will, during the coming year, require the entire output of the Eugenia Development.

The operating report on this system clearly indicates the effect of the loss of the sale of power to the Severn System, previously mentioned, and, for this reason, as well as the loss of a large power load, the total revenue obtained for power supplied on the system was considerably less than it otherwise would have been had this load reduction not taken place.

The financial standing of the system for the year was further affected by the large increase in capital, due to the installation of an additional generating unit in the power plant, and other improvements at the generating station to take care of the prospective loads, already referred to, which additions resulted in a corresponding increase in the interest charges for the year. With the addition of the five municipalities, previously referred to, and a large new industry, which will require a considerable block of power during the coming year, and, also, with the additional loads required by new industries in Hanover, Owen Sound and other municipalities on the system, a demand will be created on the generating plant that will enable this system, in future, to meet all expenses and wipe out the small shortage that has been created during the present year's operation.

WASDELL'S SYSTEM

The results of the year's operation on the Wasdell's System were not affected by the readjustment of industry and manufacturing from war to normal conditions as the district served is essentially an agricultural zone. One large industry was added as a power customer increasing the total amount of power transmitted over the system by approximately 75 per cent. A slight increase in load in the various towns served was also obtained due to the addition of small power customers and additional lighting demand. This system suffered somewhat by a loss of a portion of its market in connection with power sold to the Severn System, but the indications of the coming year are favourable for the sale of all surplus power to that district, as well as an increase in demand for power to be supplied to rural districts adjacent to the municipalities of Beaverton, Cannington and Sunderland, and, also, for additional load to be taken by a large customer

at Kirkfield. A special effort was made to give service to the farms located in various townships in Wasdell's District, and considerable detailed work was done for this purpose.

The operating report of this system also shows the effect of the loss of the sale of power to the Severn System. The operating report shows an increase in capital of \$55,899.38, due to the construction of a transmission line from Gamebridge to Kirkfield to serve a large power customer; and, also, due to changing the conductor from the generating station to Beaverton from "steel" to "aluminum." These changes also account for a corresponding increase in interest charges amounting to approximately 34 per cent. over the previous year. As there is every evidence of the load increasing on the Severn System during the coming year, the Wasdell's System will be enabled to market its surplus power in that district, and thereby secure additional revenue. A large new industry is locating on the system, which, together with prospects of sale of power to rural districts, will require the full capacity of the Wasdell's Generating Station, and both increase the revenue on this system and provide for taking care of deficits, which have occurred in the past, and, at the time of writing, the operating conditions on this system show a marked improvement.

SEVERN SYSTEM

The district served by the Severn System was somewhat affected during the year by the general depression of industrial production, due to readjustment from war to normal conditions; consequently, the demand for power was not as great as in previous years. This falling off in load did not, however, affect the system seriously, due to the fact that in previous years the power sold was considerably in excess of the capacity of the Big Chute Generating Plant, and, as this excess was obtained from surplus power available on both the Eugenia and Wasdell's Systems, the Big Chute Plant was kept loaded nearly to capacity throughout the year. Due to the unsettled financial and industrial conditions prevailing during the year, new loads did not come on the system as rapidly as anticipated, the greatest decrease in load being at Collingwood. A large off-peak customer in this municipality discontinued the use of a large block of power entirely, thereby very materially reducing the Collingwood revenue. In addition to the dropping off in load, due to general financial depression, four additional towns on the system commenced to pay sinking fund, which further increased the operating cost of the system for the year, with a result that sufficient charges were not made to this municipality to meet the cost of power supplied. The indications at the close of the year, however, give evidence of a much greater load on the system during the coming year, so much so, in fact, that either a new source of power will have to be provided, or provisions made for obtaining power from either the Niagara, Eugenia or Wasdell's Systems, to take care of the requirements of the system.

THUNDER BAY SYSTEM

This district, at the present time, supplies only one municipality, the City of Port Arthur.

The City of Fort William, however, has signed a contract with the Commission, and will, it is expected, commence taking power from the new Nipigon Plant, in the near future.

The construction of a new generating plant at Cameron's Falls, as well as the connecting transmission line to Port Arthur, proceeded very favourably during the year, and, it is expected that this plant will be completed before the expiration of the Commission's contract for power supply from the Kaministiquia Power Company early during the coming year. The work of constructing this plant was held up considerably on account of adverse conditions of labor and material, with a consequent increase in capital cost, and, as the Commission was advised by the Kaministiquia Power Company that its contract could not be temporarily extended beyond the date of expiration unless the Commission complied with the company's demands, which were considered to be excessive, it was, therefore, necessary to rush the construction work to completion, with a resulting increase in expenditure over the estimated cost of completing this work under normal conditions. The load on the district will be supplied from this new development early during the coming year. In addition to supplying the present requirements of the City of Port Arthur, this plant is being constructed with sufficient capacity to take care of the future requirements of Port Arthur and Fort William, and, also, the requirements of large industries, which are being established in this district, a number of which are now under construction.

MUSKOKA SYSTEM

The year's operation of this system, which comprises the Municipalities of Huntsville and Gravenhurst, indicates a steady demand for power to the full capacity of the generating station, although the industrial conditions, at the close of the year, resulted in a slight falling off of the load in Huntsville. Investigations were made during the year covering an extension to the generating station at South Falls to provide for increased capacity, as the load in both municipalities served was such that the existing equipment was insufficient to supply the complete power requirements. The extension was not proceeded with, however, as later in the year the demand at Huntsville dropped to such an extent as to enable existing equipment to take care of the load. It is expected, however, that as soon as conditions again become normal, arrangements will be made to take care of this extension to the generating plant to provide for increased demands, of which there is every evidence at both Huntsville and Gravenhurst, and quite probably at Bracebridge.

ST. LAWRENCE SYSTEM

Up to the middle of the year 1919, the St. Lawrence System was supplied with power from a small hydraulic plant at Iroquois.

From the 1st of May, 1919, power was supplied through a large sub-station, erected at Cornwall, at which point power was received from the Cedars Rapids Power & Transmission Company. This station was designed to carry a considerably larger load than that required by the municipalities receiving service at that time, and, throughout the year, efforts have been made to extend the system and increase the load. Arrangements have been made to supply power to five new municipalities located north and east of Cornwall, and the lines and stations to serve these municipalities are now being constructed. When these municipalities are connected, the only municipality in the district not being supplied with Hydro-Electric power will be the Town of Cornwall, near which the Commission's High Tension Station is located.

During the year applications for power were received from a number of industries, estimates being requested of the cost of supplying large blocks of power for these industries, at various points on the system.

It is expected that the growth of the load during the coming year will require an extension to be made to the Cornwall Station, to take care of the increased power demands. Already two customers have stated their willingness to sign contracts for large blocks of power, which will place this system on a good financial basis during the coming year.

RIDEAU SYSTEM

During the first half of the year, power was supplied from the Rideau Power Company, at Merrickville, to Smith's Falls and Perth, the Carleton Place Plant being operated to supply the Municipality of Carleton Place.

During part of the year the Municipalities of Smith's Falls and Perth were greatly handicapped on account of shortage of water on the Rideau Canal, due to lack of conservation of the water supply by the canal authorities, and a number of delegations appealed to the Department of Railways and Canals, at Ottawa, to have the water supply properly regulated, in order that the municipalities depending on the power supply obtained from the waters of the Rideau Canal System might not be jeopardized. This lack of sufficient water power necessitated the operation of the Smith's Falls steam plant, with the large consequent increase in operating expenses.

The demands for power on this system have been rapidly increasing since power was first supplied from the plant of the Rideau Power Company, at Merrickville, and, while this plant had sufficient capacity to supply the requirements of the municipalities during the first two years' operation, the growth of the industries in Smith's Falls, Perth and Carleton Place has been so rapid as to require a large additional supply of power, and it was, therefore, necessary, in the face of adverse labour conditions, for the Commission to proceed with the construction of a plant at High Falls, in order to obtain sufficient power to meet the requirements of these municipalities. During the period of the construction of this plant, labour conditions were exceedingly bad, and from the time the work started until its completion, the cost of labour and material had increased by over 100 per cent., with a consequent increase in the capital cost of the plant over the original estimates, which were based on the condition of material and labour existing at the time the construction work was started. On May 1st this plant was put into service, and since that time the power loads of the various municipalities on the system have rapidly increased, and it is expected that during the coming year, with a plentiful supply of power on this system, there will be a marked improvement in the financial condition of the system.

CENTRAL ONTARIO SYSTEM

The financial results of the operation of this system during the fiscal year have been satisfactory. The demand for power increased to such an extent that the Commission decided that additional generating capacity would be required, and authority was therefore obtained for the construction of a new generating station at Ranney's Falls, near Campbellford. The completion of this station will add 10,000 horse power to the capacity of the system. Work on its construction is progressing

favourably, and it is expected that it will be placed in regular service in September, 1921.

Contracts have been entered into between the Commission and a number of municipalities which had not been served previously, and all these new municipalities will receive service early in 1921.

During the month of September and the first half of October the operation of the system was seriously handicapped by low water in the Trent River. The control of the storage reservoirs on the river is not vested in the Commission, and the curtailment of service resulting from the methods employed by those in control was beyond the power of the Commission to prevent. A serious shortage of power for a period of six weeks resulted in great loss to manufacturers in all the municipalities served.

The Campbellford Pulp Mill had a most successful year, owing to the strong demand for groundwood and the high market price.

Respectfully submitted,

ADAM BECK,

Chairman

TORONTO, ONT., March 30th, 1921.

COLONEL SIR ADAM BECK, Kt., LL.D.,

*Chairman, Hydro-Electric Power Commission of Ontario,
Toronto, Ont.*

SIR,—I have the honour to transmit herewith the Thirteenth Annual Report of the Hydro-Electric Power Commission of Ontario for the fiscal year ending October 31st, 1920.

I have the honour to be,

Sir,

Your obedient servant,

W. W. POPE,

Secretary.

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

COLONEL SIR ADAM BECK, Kt., LL.D., Chairman.

HONOURABLE I. B. LUCAS, K.C.

LT. COL. HON. D. CARMICHAEL, D.S.O., M.C.

W. W. POPE, Secretary.

F. A. GABY, Chief Engineer.

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THIRTEENTH ANNUAL REPORT OF THE Hydro-Electric Power Commission of Ontario

VOLUME II SECTION 1 OPERATION OF THE SYSTEMS

Ontario Power Company, 1919-1920 .

The operation of the Ontario Power Company, for the year ending October 31st, 1920, has not been marked by any unusual occurrences and no new construction of importance has been carried out. The completion of the plant last year brought its maximum capacity up to approximately 150,000 k.w., which with improved equipment and safer operating conditions, due to minor changes in apparatus, connections and layout, has made it feasible to give service to customers as nearly perfect as is commercially possible.

The unusually severe winter of 1919-20 did not interfere seriously with the operation of the plant, which, except for one or two days maintained an output only slightly less than normal, although ice conditions were unusually severe from the middle of December until the middle of May. There was no serious damage to equipment on account of the ice and the minor repairs necessary were attended to quickly with little or no interference to service.

In view of the widespread misunderstanding of the situation, by the public in general, it may be in order to outline briefly the reasons and circumstances under which ice in the river interferes with production of power. Ice starts to form in Lake Erie early in December, in the average winter and soon after begins to discharge through the Niagara River. Some ice also forms in the river, particularly along the shores, where on account of the shallow water, it picks up stones and other debris, which if taken into the power plants may damage the water turbines more or less seriously. A sudden change in temperature fills the water with slush or needle ice which, when it strikes the diverters intended to keep ice out of the plant, freezes into a solid mass and gradually blocks the openings through which the water flows. The blockage that results drops the head on the plant and is the cause of some decrease in output. This class of ice trouble is seldom serious, as the water passages are easily cleaned by dynamiting the ice with light charges. However, the presence of slush ice makes it impossible to use the racks ordinarily intended to prevent floating rubbish coming into the water wheels. The racks have to be removed at the first appearance of this ice in the river and the plant is, therefore, obliged to run without their protection for the remainder of the season. The slush ice carried into the plant passes through the turbines quite easily, and of itself is not dangerous, and probably accounts for only a slight decrease in efficiency, and a little lower output than with clear water. However, the heavier lake ice is too bulky to be discharged through the restricted passages of the turbines, and if once taken in, fills the turbines completely so that in a very short time their output is reduced to zero. When this condition obtains, the only practical solution is to allow the machine to continue to run as a synchronous motor, in case there is not enough water getting through to supply the friction losses, leave the turbine gates wide open and allow the water to gradually wear the ice away.

The Commission's supply of power is obtained partly from the Canadian Niagara Power Company, which, on account of its unfavorable location on the river, is more subject to ice trouble than the Ontario Power Company's plant. Most of the power shortage caused by ice last winter was occasioned by ice blocking the machines at this plant. No expense, however, has been spared by the Canadian Niagara Power Company in attempts to eliminate or minimize this trouble, although their efforts have not yet been as successful as might be desired. The Ontario Power Company suffers chiefly from ice trouble when strong east winds are blowing which drive the ice fields to the west shore of the river and into the head works of the plant. On account of the formation of the river and the physical arrangement of the water inlets, it is impossible to keep all the ice out and a quantity, varying with the amount of ice in the river and the intensity of the wind, is bound to find its way into the water wheels.

The flow of ice in the river continues until the middle of May, due to the presence of large ice fields in Lake Erie, which, when driven to the east end of the lake by the prevailing winds, pass down the river and with unfavourable conditions may cause trouble in the generating station at a time when spring is well advanced. This was the case last year when large fields of lake ice did not break up until the middle of May, thus causing trouble for a short time in the plant at that late date.

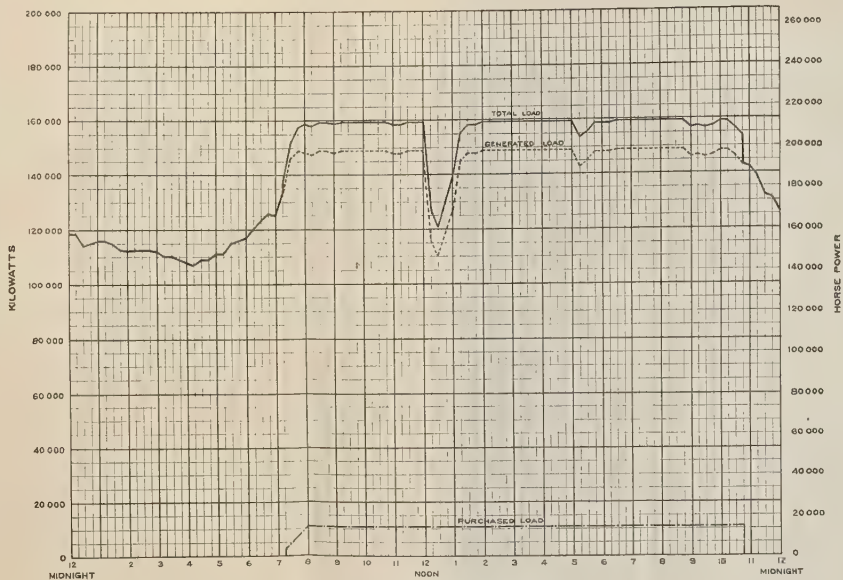
While it is impossible to prevent ice troubles in the plants now constructed, due to the relation of the water inlet works to the river and on account of conditions which cannot now be changed, the same difficulties will not occur in the case of the new Queenston plant, which is being provided with the most modern means for keeping ice out of the canal, so that it can be confidently expected that with the completion of this plant no more serious trouble with river ice will arise. A great deal of study has been given this subject, and after elaborate experiments an arrangement of the water intake was designed which, it is fully expected, will eliminate the ice troubles to which the existing plants are subjected.

While no extensive alterations or additions were made to the power house and generating apparatus, a large number of improvements, not of great importance alone, but in the aggregate of real value to the plant, have been carried out. All the turbines and auxiliary equipment were overhauled and restored to their original efficiency. The runners on No. 12 turbine, replaced last year by castings supplied during the hurried production of war years, were not found entirely satisfactory, as, in fact, had been anticipated, and one of these was replaced. Other extensive repairs were made to this turbine to reduce the clearances and improve its efficiency.

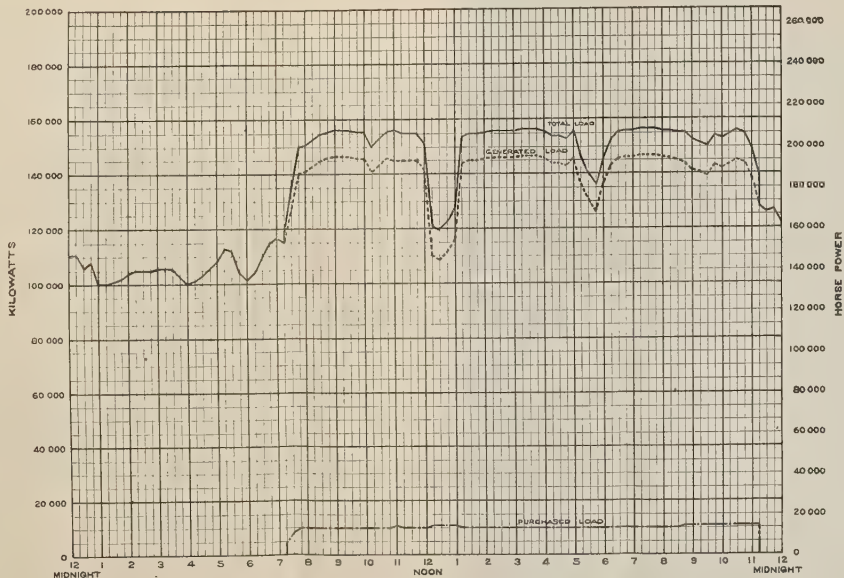
An electric welding set has made it possible to reclaim defective runners and thus materially lengthen their life. The value of these runners fully warrants the expense incurred, even though the repaired runners should have a relatively short life, which is contrary to expectations.

The work started last year on rebuilding the operating mechanism of the nine-foot gate valves on Units 7 to 12 has been continued, and is now completed. All of these valves have been provided with rising stem operating mechanisms, the design of which has shown itself to be an unqualified success in operation. The old mechanisms had reached the limit of their useful life and were no longer reliable. In addition to rebuilding these valves, all the equipment in the valve chamber was repainted.

Work has been started on reconstructing the Voith relief valves for the Units 1 to 10. The present valves are nearly worn out, and as they are of an obsolete type, it was decided to rebuild them in accordance with designs of the Commis-



**TYPICAL DAILY LOAD CURVES
THE ONTARIO POWER COMPANY
NOVEMBER 1919**



TYPICAL DAILY LOAD CURVES
THE ONTARIO POWER COMPANY
OCTOBER 1920

sion's Engineers, to meet the requirements of modern practice. It is expected that their reliability of operation will be considerably improved by the changes contemplated.

All the exciter sets have been overhauled and restored to first-class condition. Guards have been provided over the exposed fans on these units which were a source of danger to workmen.

Improvements to the ventilation of the power-house were made, which have materially reduced the maximum temperatures prevailing during the hot weather. These changes consist largely in alterations to the existing system of cooling, so as to better its efficiency, and were carried out at very small expense, particularly in view of the excellent results obtained.

Changes have been made in the method of ventilation for the generators, with a view to eliminating the chance of destruction of the machines due to internal fires. Recent experiences have shown that the generally accepted schemes of forced air ventilation for large semi-enclosed and totally enclosed generators were undesirable in view of the added risk to the machines from fire. Careful experiments were made, from which it was conclusively shown that such a method of ventilation was no better than the simpler and very much safer ideas that were under consideration and which were then adopted.

No changes of any consequence were made in the grouping of machines on the different busses, but some temporary work erected during the war was done away with and permanent connections installed.

Relay systems and metering equipment have not been changed to any extent, although minor improvements have been made. New type graphic ammeters have been installed on the different generators, to replace those of older designs which failed in service. The older types are still being maintained on some units, but will be replaced as soon as it is convenient to do so.

The step-up transformers used for supplying 60,000 volt power were overhauled and, where time permitted, extra bracings added to lessen chance of failure of the transformers on short circuit. This work is not entirely completed, but is being proceeded with whenever it is possible to get these units out of service.

The 60,000-volt line entrance structure and lightning arresters were completely reconstructed to replace the old equipment which, due to wear and tear, was no longer in safe operating condition. These changes were successfully carried out without interrupting the supply of power to the customers fed from the 60,000-volt lines.

No new lines were built by the Ontario Power Company during the past year. All lines were overhauled and necessary repairs made. In a few instances improvements in the way of more flexible switching arrangements were made. A connection was constructed by which power supplied to the Hydro-Electric Power Commission from the Canadian Niagara Power Company is transmitted to the Commission's Niagara Station through the Ontario Power Company's lines and Distributing Station. This connection was erected as a temporary expedient to relieve the shortage of power in the quickest possible time, and is not marked by any special features. Reactances were installed at the Ontario Power Company's end of this line to limit short circuit current.

TABLE No. 1.—SUMMARY OF POWER GENERATED
THE ONTARIO POWER COMPANY OF NIAGARA FALLS, 1919-20

Month	Max. Gen. Load, K.W.	K.W. Hrs. Generated	K.W. Hrs. Sold in Canada	K.W. Hrs. Exported	Average Gen. Load K.W.	Load Factor per cent
November, 1919.....	152,000	89,419,900	62,786,300	26,633,600	124,200	81.7
December, 1919.....	152,000	94,857,000	66,276,200	28,580,800	127,500	83.8
January, 1920.....	149,300	94,903,300	64,304,000	30,599,300	127,600	85.4
February.....	147,400	82,798,900	53,088,300	29,710,600	119,000	80.7
March.....	147,000	86,607,000	55,480,100	31,126,900	116,400	79.2
April.....	144,000	80,350,300	53,606,700	26,743,600	111,600	77.5
May.....	148,300	82,129,100	52,672,400	29,456,700	110,400	74.5
June.....	148,000	80,543,700	50,565,400	29,978,300	111,900	75.5
July.....	147,800	78,657,200	49,267,300	29,389,900	105,700	71.5
August.....	148,000	82,139,300	52,231,600	29,907,700	110,400	74.5
September.....	149,000	82,967,500	54,512,900	28,454,600	115,200	77.4
October.....	149,500	90,838,300	61,042,200	29,796,100	122,100	81.6
Total.....	.....	1,026,211,500	675,833,400	350,378,100	116,800	.....

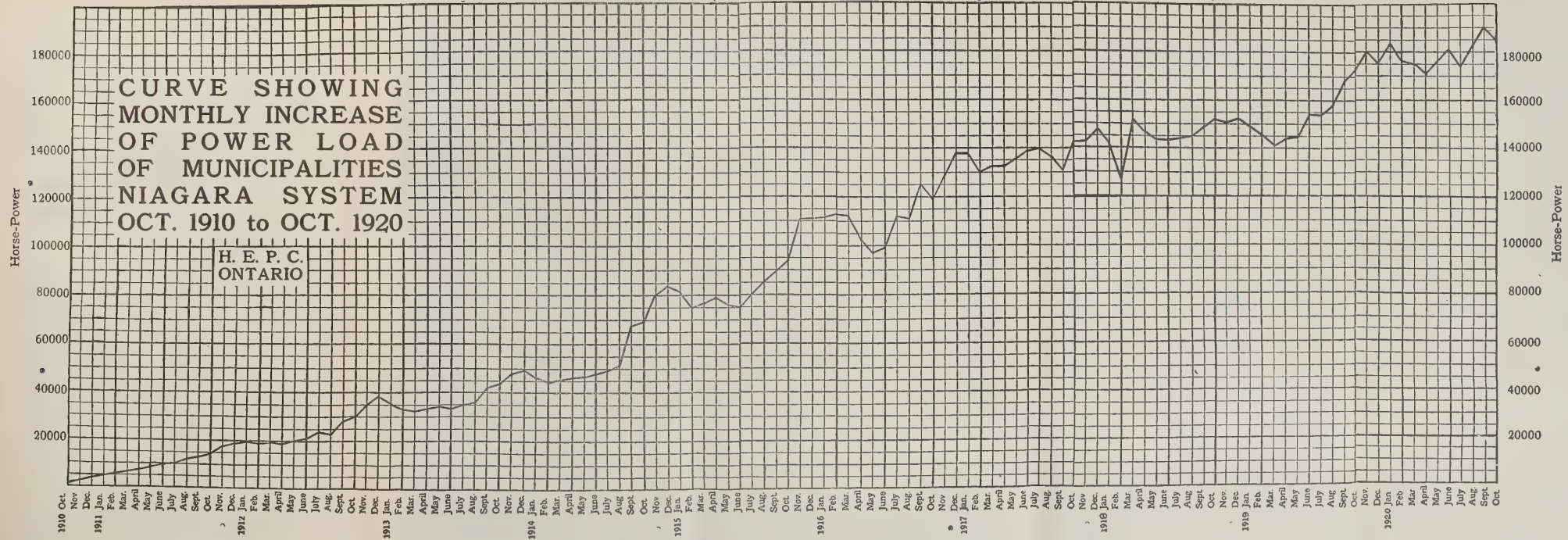
The maximum generated loads are momentary peaks. The load factor is the average load divided by the maximum momentary peak and multiplied by 100.

TABLE No. 2.—SUMMARY OF GENERATION AND DISTRIBUTION
ONTARIO POWER COMPANY OF NIAGARA FALLS, 1919-1920

Month	Max. Output O.P. Co., H.P.	Max. Purch. Power, H.P.	Max. Total, Combined Output, H.P.	K.W. Hrs. Gen. O.P. Co.	K.W. Hrs. Purchased	K.W. Hrs. Sold
November, 1919..	201,472	15,147	215,552	89,419,900	4,048,100	93,468,000
December, 1919...	201,472	14,879	216,222	94,857,000	4,760,500	99,617,500
January, 1920....	197,452	14,745	213,137	94,903,300	5,576,600	100,479,900
February.....	195,040	15,416	208,842	82,798,900	4,607,700	87,406,600
March.....	194,370	15,416	208,847	86,607,000	4,995,500	91,602,500
April.....	190,350	15,282	201,874	80,350,300	4,662,000	85,012,300
May.....	195,040	15,818	209,378	82,129,100	4,105,700	86,234,800
June.....	196,380	15,550	211,532	80,543,700	4,555,300	85,099,000
July.....	196,380	15,282	210,456	78,657,200	5,775,600	84,432,800
August.....	197,050	15,416	211,528	82,139,300	4,577,100	86,716,400
September.....	197,721	15,147	212,466	82,967,500	4,854,200	87,821,700
October.....	199,730	15,818	212,872	90,838,300	2,802,500	93,640,800
Totals.....	.....	.....	.....	1,026,211,500	55,320,800	1,081,532,300

Niagara System, 1919-1920

The operation of the Commission's Niagara System, consisting of 16 high tension stations, 121 distributing and metering stations, 99 customers' stations, 1,054 pole miles of low tension feeders, 449 pole miles of telephone lines and 466 tower miles of high tension lines, was for the past year most encouraging. During practically the entire period the power shortage was very acute, and the difficulties encountered in keeping the system operating under such conditions most severe. It was necessary to place restrictions on all customers during the entire year, and it reflects very creditably on the co-operative spirit between the



Commission and its customers that the service supplied was of such high order. With a view to alleviating, to some extent, the power shortage, the Commission arranged to purchase from the Canadian-Niagara Power Company the output of one of their machines of approximately 9,000 h.p. capacity. This machine, which was connected to our service on January 1, 1920, bettered conditions for a short time until the normal increase in the customers' loads made itself felt, with the result that the shortage problem remains as serious as earlier in the year. The power shortage was greatly intensified, due to Toronto Power Company removing from our service on October 15th one of their machines of approximately 13,000 h.p., the lease for which expired on that date. Previous to this time the Commission, realizing the seriousness of losing a block of power of this magnitude, had opened negotiations with the Toronto Power Company for the renewal of the contract, but were unable to make satisfactory arrangements. However, it is fully expected such arrangements will be completed at an early date.

The power supplied from the Ontario Power Company was most satisfactory, and with the exception of an exceedingly short time, continuous. The ice conditions on the Niagara River during the winter of 1919-1920 were the most severe experienced in many years; nevertheless, the output of the plant was maintained at practically normal.

The supply from Canadian Niagara Power Company of 50,000 h.p. to our Niagara High Tension Station was, with the exception of a period covered by ice troubles, very satisfactory. During the ice trouble period, however, the Canadian Niagara Power Company plant was greatly affected, and in some instances our supply was reduced to one-quarter of normal. With the exception of the month of March, the ice trouble period extended from December 17th, 1919, to May 13th, 1920, and during all this time our normal supply was more or less affected, and in consequence the supply to customers on the High Tension System correspondingly affected. The rapidly changing conditions at the Canadian Niagara Power Company's plant worked considerable hardship on the Niagara System, in that it was impossible to predict with any degree of certainty an hour in advance the amount of power we would receive, and consequently the customers could not be advised of their available supply.

Two very severe storms were experienced during the year, the first, occurring on November 29th, 1919, was general and caused considerable damage over the entire country. However, with a few exceptions, the Commission's lines and equipment came through in good condition, and the only inconvenience experienced was caused by short interruptions to low tension feeders, due to branches and trees being blown across the circuits. No trouble of any consequence was experienced on the high tension tower lines during this very severe storm. The second, occurring on July 23rd, 1920, was most severe in the district between Dundas and Niagara, and although some damage was occasioned, four towers being blown over and completely wrecked in one of the tower lines near Smithville, there was no total interruption to the service on the system, and temporary repairs had been made and the lines restored to service within twenty-four hours. The period during which lightning disturbances were reported from our different high-tension stations extended from March 16th to October 24th, and totalled 43 storms in all, three of which were general, passing over the entire system. The apparatus installed to relieve the system of excessive surges set up due to lightning disturbances proved most effective, in that no system interruption occurred from this cause.

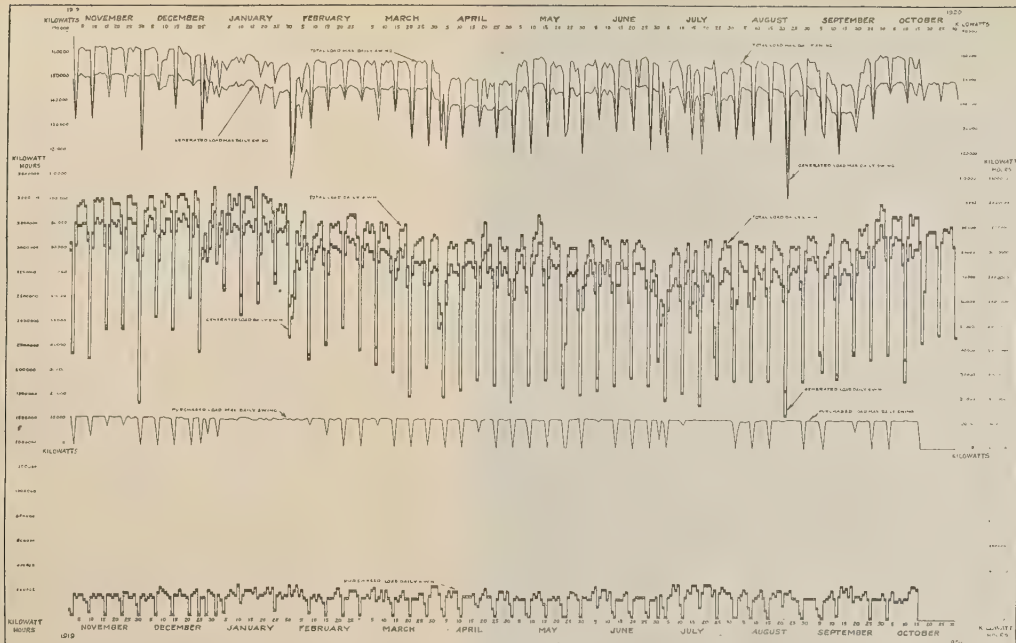
During the year the capacity of a number of stations was increased as follows: At Niagara Station one bank of 3,500 k.v.a. transformers was connected to the 110,000-volt bus; at London one bank of 2,500 k.v.a. transformers replaced one bank of 1,250 k.v.a. transformers; at Woodstock one bank of 1,250 k.v.a. transformers replaced one bank of 750 k.v.a. transformers; at Brant one bank of 2,500 k.v.a. transformers replaced one bank of 1,250 k.v.a. transformers; while at Kent one bank of 1,250 k.v.a. transformers replaced the temporary bank of 750 k.v.a. transformers. At the Elmira Distributing Station the capacity was increased to 450 k.v.a. from 225 k.v.a., at Listowel to 600 k.v.a. from 300 k.v.a., and at Norwich to 225 k.v.a. from 150 k.v.a. The Ailsa Craig load was removed from the Lucan Station transformers and connected to a bank of 75 k.v.a. transformers in the Ailsa Craig Station, which was completed during the year.

The Line Maintenance Field Force made their annual test of all insulator units on the high-tension lines, and any which were below standard were removed and replaced with good units. The benefit derived from such procedure is shown in a most marked manner in that no system interruptions, due to line insulators failing, have occurred for a number of years. The usual routine of maintaining the high-tension lines, the numerous low-tension feeders and telephone lines is handled by this force, and these men are always available to assist any customer should they request aid. In addition to the above regular work, our line staff, during the year, completed the restringing of the high-tension section between Kitchener and Stratford, replacing the iron conductor with 6/0 steel reinforced aluminum conductor. The operating conditions in the Stratford and St. Mary's districts were considerably improved by this change. During the war we found it necessary to increase the carrying capacity of some of our trunk feeders, and since it was impossible to secure aluminum from the manufacturer, we were forced to secure same elsewhere. At this time the aluminum conductor on the 4,000-volt feeder, between Tilbury and Comber, was replaced with an iron line; however, due to the increasing power demand at Comber during the past year, it was necessary to take down the iron conductor and replace it with No. 2 steel reinforced aluminum.

The necessity for additional private telephone lines between the Commission's Head Office at Toronto and the Dundas Switching Station has been very keenly felt for some time, and after considerable investigation it was decided to introduce a transposing scheme of the present four physical circuits, so as to obtain in addition two phantom circuits, which are distinct talking circuits. The cost of obtaining the necessary extra talking circuits in the above manner was very much less than that of erecting two additional physical circuits, and the results obtained since the completion of this work show clearly that we were well advised in handling same in the manner stated. The engineering details were handled by the Operating Department's Telephone Engineer, and the field work by the line maintenance section of the Operating Department.

Outdoor 110,000-volt switching structures were erected at our Brant and Woodstock High-Tension Stations, tapping the through line from Dundas to London at these points, and having the necessary switches for sectionalizing the line for maintenance and operating purposes. The increased flexibility in the operation of the high-tension line between Dundas and London and the benefits derived by reason of same during insulator testing periods much more than compensates the expense in erecting such structures. In connection with the double circuiting during the coming year of the high-tension line between Dundas and Kitchener,

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Acton	173	193	20
Ailsa Craig	103.2	128.6	25.6
Aylmer	156.8	172	15.2
Ayr	41.5	77.2	35.5
Baden	152.3	175.6	23.3
Beachville	183.6	223	39.6
Blenheim	123.3	134	10.7
Bolton	130.6	105.9	—
Bothwell	119.7	120.6	.9
Brampton	848.5	965	116.5
Brantford	3,056.4	4,162	1,105.6
Brigden	93.8	107.1	13.3
Burford	54.7	37.8	—
Burgessville	29	42.4	13.4
Caledonia	58.3	83	24.7
Chatham	1,340.5	2,151.5	811
Clinton	168.3	154	14.3
Comber	26.8	135.4	108.2
Cooksville	63.6	—	—
Dixie			
Dashwood	49.6	52.6	3
Delaware	9.7	11.7	2
Dorchester	24.3	89.8	65.5
Drayton	44.2	48.2	4
Dresden	250.6	196.3	—
Drumbo	16	21	5
Dublin	22.5	45.3	22.8
Dundas	1,091.3	1,132.7	41.4
Dunnville	248	241.3	—
Dutton	101.8	107.2	5.4
Elmira	185	213	28
Elora	219.8	194.3	—
Embro	44.2	58.4	14.2
Essex County	911.5	1,126	214.5
Etobicoke Township	236	335	99
Exeter	148.7	175.6	26.9
Fergus	147.7	185	37.3
Forest	118	116	—
Galt	2,634	2,931.5	297.5
Georgetown	421	524	103
Goderich	362	496	134
Granton	39.5	67.7	28.2
Grantham Township	29.5	26	—
Guelph	3,255	3,638	383
Guelph Military Hospital	179.6	160.8	—
Guelph O. A. College	166.2	147.4	—
Hagersville	242.6	260	17.4
Hamilton	14,937	17,895	2,958
Harriston	122	227.8	105.8
Hensall	50	85.7	35.7
Hespeler	375.3	348.5	—
Highgate	76.4	86	9.6
Ingersoll	930.2	1,085.7	155.5
Kitchener	5,784.2	6,648.8	864.6
Lambeth	16	22.7	6.7
Listowel	372.6	453	80.4
London	10,757	10,656.8	—
Lucan	155	216.6	61.6
Lynden	92.5	87.8	—
Milton	608.5	670	61.5
Milverton	274	290.8	16.8
Mimico	265.4	388.7	123.3
Mimico Asylum	32.1	37.5	5.4
Mitchell	181	195.7	14.7
Moorefield	36.2	123.5	87.3
Mt. Brydges	26.8	23.1	—



THE ONTARIO POWER COMPANY
SUMMARY OF DAILY LOADS
1919-1920

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Niagara Falls	2,707.8	3,610	902.2
Niagara-on-the-Lake	158.2	229.2	71
New Hamburg	225.2	236	10.8
New Toronto	3,036.2	3,284.2	248
Norwich	203.3	223	19.7
Oil Springs	112	95	—
Otterville	34.2	33.5	—
Palmerston	101.8	191.6	89.8
Paris	682.3	643.4	—
Petrolia	383.4	442.3	58.9
Petersburg and St. Agatha	21.4	17	—
Plattsville	100.5	100.5	—
Port Credit	87.1	103.2	16.1
Port Dalhousie	122.6	144.7	22.1
Port Stanley	75.7	124.6	48.9
Preston	1,374	1,485.2	111.2
Princeton	8.8	15.6	6.8
Provincial Brick Yard	136.7	123.3	—
Ridgetown	155.5	173.6	18.1
Rockwood	56.3	41.2	—
Rodney	41.8	91.6	49.8
Sarnia	2,486.6	2,795	308.4
Seaforth	325.7	281.5	—
Simcoe	187.6	214.4	26.8
St. Catharines	3,070	3,477	407
St. George	61.6	60.3	—
St. Jacob's	92.5	88.4	—
St. Mary's	560.3	878	317.7
St. Thomas	2,356.5	2,417	60.5
Stamford Township	200	423.5	223.5
Stratford	1,662.3	2,024	361.7
Strathroy	225.2	387.4	162.2
Tavistock	266.7	264	—
Thamesford	95.8	83	—
Thamesville	56.3	62.7	6.4
Thorndale	120	110	—
Tilbury	87.1	131.3	44.2
Tillsonburg	762.7	819	56.3
Toronto	56,944	59,598	2,654

New Municipalities—Niagara System

Municipality	Date Connected	Initial Load in H.P.	Load in H.P. October, 1920	Increase
Port Colborne.....	March 1st, 1920	273	270	—
Markham.....	April 1st, 1920	20	37	17
Parkhill.....	May 3rd, 1920	40.2	48.2	8
Glencoe	August 14th, 1920	45.5	67.5	22

Severn System

The generation and distribution of power for use by the municipalities on the Severn System has been carried on very satisfactorily during the year. The power for the system is generated at the Big Chute Plant on the Severn River, but when the demand by the customers on this system exceeds the maximum capacity of the plant, power is obtained from the Commission's generating stations at Eugenia and Wasdell's Falls.

The Big Chute Plant, the Eugenia and Wasdell's Plants of the H.E.P.C., and the Swift Rapids Plant of the Orillia Commission have operated this year very successfully in parallel, with decided benefit to all systems served.

Adequate housing and storeroom facilities at the Big Chute Plant for the live stock and transportation equipment were arranged by remodelling and re-constructing the old construction camp buildings.

A permanent roadway was opened up between the Big Chute Plant and Severn Falls on the C.P.R., a distance of about six miles, to afford the required transportation facilities for getting in or out supplies, repair parts, or medical attention, if necessary, during the spring and fall. During the spring break-up, and sometimes during the fall months, transportation by river becomes practically impossible.

A suitable building for storeroom, and for housing the machine shop tools required in connection with maintenance work, was erected at the Big Chute Plant.

A small office building was erected on the switching station property at Waubauskene, and an office opened to handle the details on the Severn System and Combined System operation and maintenance.

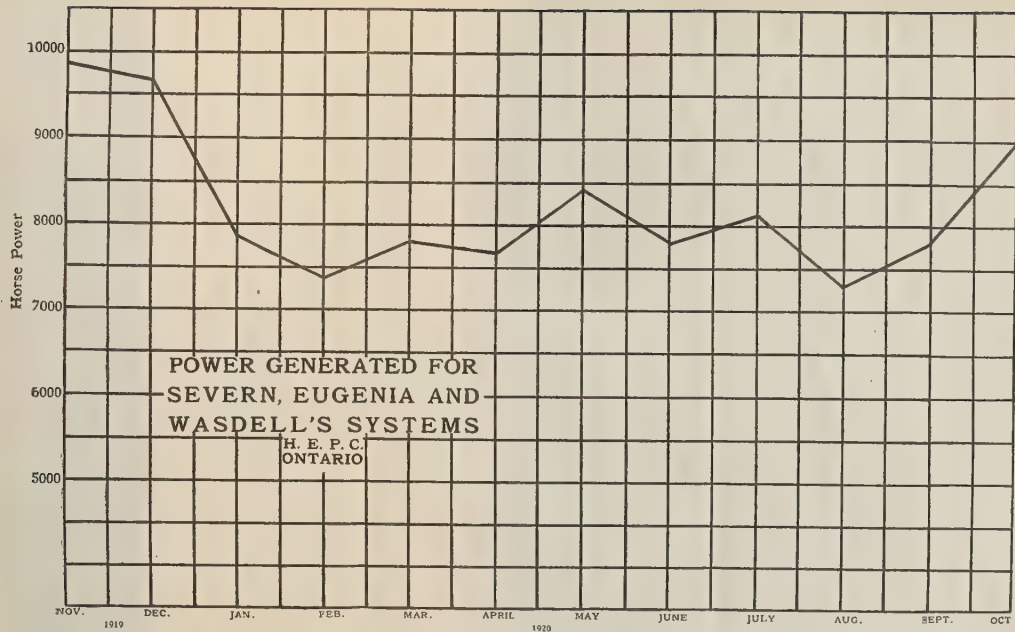
Considerable maintenance work was carried out on the high-tension lines between Waubauskene and Big Chute, and the switching structure at Black River on this section of the line was completely overhauled. On a number of sections of high-tension lines exposed to severe wind storms, additional storm guys were installed to increase strength of these sections.

On several of the high-tension lines where the poles are affected to some extent by rot at the ground line, considerable maintenance work was carried out to strengthen these lines.

An S. & C. 22,000-volt arrester was installed at Thornton Station this spring, which has apparently been of considerable benefit to the station equipment and to the system in general.

Severn System

Municipality	Load in H.P. October 1919	Load in H.P. October 1920	Increase
Midland.....	1,160.8	1,362	201.2
Penetang.....	832.8	900.8	68
Collingwood.....	1,309.6	1,286.8	....
Barrie.....	654	750.6	96
Coldwater.....	47	49.5	2.5
Elmvale.....	103.2	111.2	8
Stayner.....	140.4	184	43.6
Creemore.....	49.5	45.8	....
Waubauskene.....	23	26.1	3.1
Pt. McNicoll.....	32.1	36	3.9
Victoria Harbor.....	46.6	48.2	1.6
Camp Borden.....	163.5	139.4	....
C.P.R. Elevator.....	1,290.7	1,099	....
Cookstown.....	69	55	....
Alliston.....	122	132.7	10.7
Bradford.....	38.8	52.2	13.4
Beeton.....	84.4	89	4.6
Tottenham.....	24.7	31.2	6.5
Thornton.....	10	12	2



Eugenia System

The operation of the Eugenia System has been very satisfactory this year, and the load has increased over the previous year.

The power for the system is generated at Eugenia Falls Power House, and this plant is operated in parallel with the H.E.P.C. plants at Big Chute on the Severn System, Wasdell's Plant on the Wasdell's System, and the Swift Rapids Plant, owned and operated by the Orillia Water, Light and Power Commission. The parallel operation of these plants is a great benefit to all systems served.

The installation of the third unit, consisting of a 4,000 h.p. turbine, 2,820 k.v.a. generator, and 40 k.w. exciter, was completed and unit placed in service. The operation of this unit has been successful, and has aided to a great extent in the operation and maintenance of the plant. Previously the first two units were required in constant service to supply the system, rendering it impossible to shut down either of them for a sufficient length of time for proper overhauling. After the No. 3 unit was placed in service the No. 1 unit, of 2,000 h.p. capacity, was taken out of service and its turbine and generator completely overhauled.

Johnson valves were installed on each of the old turbines in place of the old gate valves, which it had become almost impossible to operate under the head at this plant. The Johnson valves are hydraulically operated, and afford a very much more rapid means of controlling the water to the turbines.

The alterations made and additional equipment and transformer capacity installed at the Hanover Station allows increased load to be carried for the Hanover and Neustadt municipalities, with added facilities for operation and maintenance of the equipment at this station, and improved service to the customers fed out of the station.

On a number of sections of the high-tension line which were exposed to severe wind storms, additional storm guys were installed to strengthen the line.

Eugenia System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Owen Sound.....	1,139.4	1,340	200.6
Flesherton.....	67.6	55.4	—
Dundalk.....	93.2	104.5	11.3
Durham.....	85.7	130	44.3
Mt. Forest.....	152.2	192.7	40.5
Chatsworth.....	22.2	28.6	6.4
Markdale.....	99	90.6	—
Holstein.....	9.3	9.6	.3
Chesley.....	230.5	247	16.5
Shelburne.....	158	162.2	4.2
Orangeville.....	120	144.5	24.5
Horning's Mills.....	5	5	—
Grand Valley.....	59.9	63.6	3.5
Arthur.....	159.5	126	—
Hanover.....	650	727.8	77.8
Tara.....	31	53.6	22.6
Elmwood.....	52.9	58	5.1
Carlsruhe & Neustadt.....	64.3	104.5	40.2

Wasdell's System

The load on the Wasdell's System has shown an encouraging growth during the year, the load on the existing stations having increased and new customers being taken on. The generating plant at Wasdell's Falls, on the Severn River, has operated throughout the year in parallel with the Big Chute Plant on the Severn System, and the Eugenia Plant, and with the Swift Rapids Plant of the Orillia Commission. Although smaller than the other three plants with which it operates in parallel, it has added materially to the successful results obtained.

The excess power available at Wasdell's, over and above the demands by the customers on the Wasdell's System, is by aid of the parallel operation transmitted and used by the customers on the Severn System.

The system was extended to serve the Municipality of Kirkfield and the plant of the Crushed Stone Company, Ltd., near Kirkfield. Also several rural extensions were added to serve farming districts on the south end of the system.

The removal of the steel conductor on certain portions of the high tension line and the replacing of same by aluminum conductor was of considerable benefit in connection with the regulation of voltage and operation of the System.

To facilitate the transmission of the necessary instructions and messages relating to the operation of the Wasdell's generating station in parallel with the other plants, and in connection with the operation and maintenance work on the Wasdell's System, the telephone line was double-circuited between the Power House and Fawkham Junction. This arrangement permits the use of one telephone line for communication between Wasdell's Plant and the other plants operating in parallel, and the use of the other line in connection with the operation and maintenance work on the Wasdell's System. This arrangement has proved a benefit to the system.

The turbines and generators at this plant were completely overhauled during the summer.

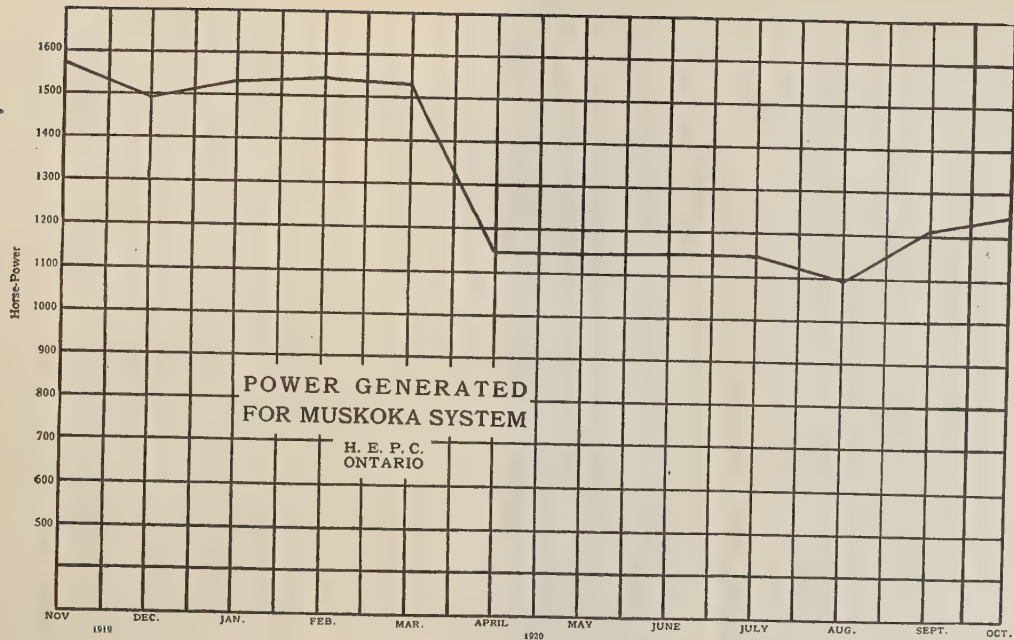
Extensions were made to the operator's cottage at Wasdell's Plant. The kitchen was enlarged and a verandah added to the front of cottage, to furnish better facilities for the comfort and housing of the operating staff at this plant.

Wasdell's System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Beaverton.....	100.5	88.4	—
Brechin	65	81	16
Cannington	70.3	101.8	31.5
Sunderland.....	40.2	75.5	35.3
Woodville.....	50	89.5	39.5

New Municipality—Wasdell's System

—	—	Initial Load H.P.	Load in H.P. October, 1920	Increase
Kirkfield.....	Connected June 18th, 1920	10.5	15.6	5.1





Muskoka System

The generation and distribution of power for use by the Municipalities of Huntsville and Gravenhurst, on the Muskoka System, has been very satisfactory during the year. The power for distribution is generated at the South Falls Plant, on the south branch of the Muskoka River, about three miles south of Bracebridge.

Certain repairs were completed on the main dam at this plant that greatly strengthened this structure, and made it possible to use the river flow more efficiently for power purposes. No trouble was experienced at this plant during the summer due to water shortage.

Muskoka System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Gravenhurst.....	827	611	—
Huntsville.....	841.8	655.5	—

St. Lawrence System

The St. Lawrence System has enjoyed a year of ample power supply and one which has not been notable for any particular operating features. Shortly after the completion in January of two operators' cottages at Cornwall, a reduction in the staff was made which has resulted in a noticeable saving. Attendants had been continually on duty in the station, three shifts being maintained, but the installation of bell alarms in the station and cottages, so arranged that the automatic opening of any of the oil switches, or the failure of the water supply on either of the transformers would ring them, made it possible to dispense with one operator, maintaining a staff consisting of a superintendent, one operator, and one line patrolman with some experience in station operation. This method of operation worked out very well in practice.

For the convenience of the Toronto Paper Company, temporary power was supplied to them during the latter part of March and the early part of April, amounting in all to about a month, during which the Department of Railways and Canals had unwatered the Cornwall Canal and thus made the Company's hydraulic-driven generator inoperative. This additional power amounted to about 475 h.p., and largely accounts for the abrupt increase in the system load for these months.

Neglecting the unnatural shape of the load curves for March and April, a gradual though substantial increase is evident; in fact, October, 1920, shows an increase of 500 h.p. over October, 1919, and while this year's operation has been without particular incident, all present indications point to an unprecedented expansion during the coming fiscal year.

St. Lawrence System

Municipality	Load in H.P., Oct., 1919	Load in H.P., Oct., 1920	Increase
Brockville.....	965	1,048	83
Prescott.....	251	220	...
Winchester.....	82	96	14
Chesterville.....	150	130	...
Williamsburg.....	25	17.6	...
Toronto Paper Co.....	288	725	437

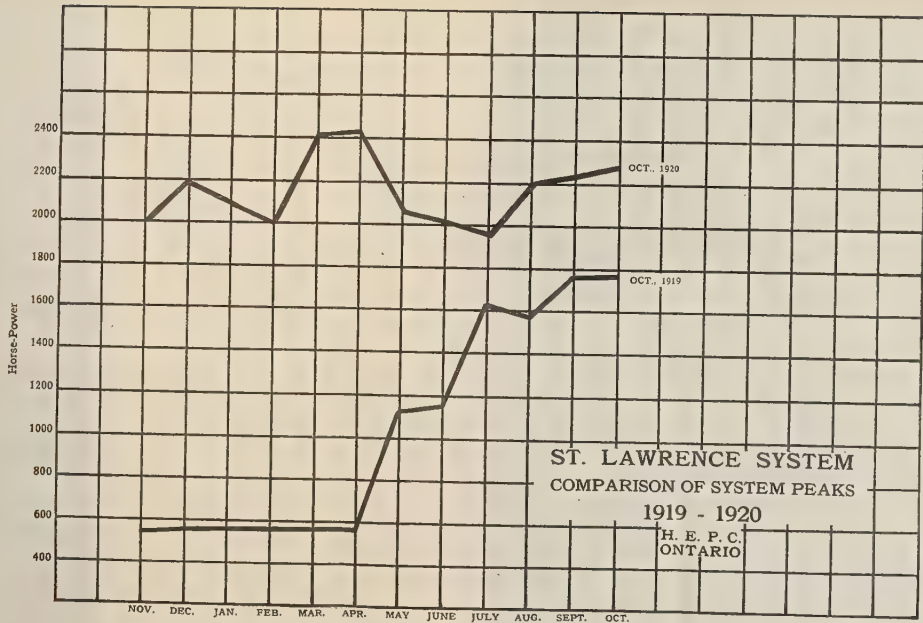
Central Ontario System

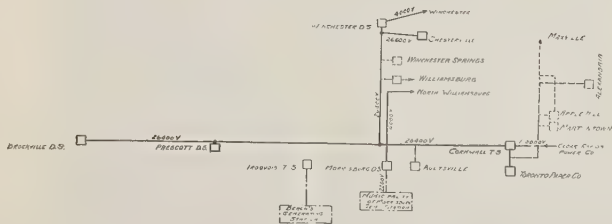
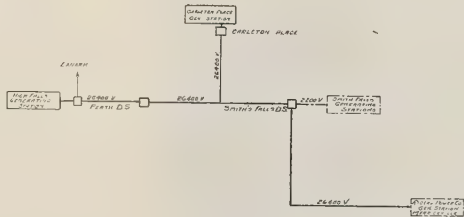
Owing in part to the number of generating stations and the various loops and rings in the transmission network of the Central Ontario System, the service has been of a very high standard, both as to continuity and voltage regulation. Line trouble, when experienced, has been for the most part confined to short sections, through the selective action of relays, which automatically isolate and cut out sections on which trouble develops without disturbing the rest of the system. No complete system interruption has occurred during the year, and each town has, as a rule, been interrupted only when trouble has occurred on its own particular section.

A very important line was added to the system May 30th, when the Healy Falls-Peterboro line was put in service. This line completes a loop with the original lines from Healy Falls to Peterboro, via Trenton and Port Hope, and thereby provides two sources of power to Brighton, Colborne, Cobourg, Port Hope, Millbrook and Peterboro; also, in a sense, to Newcastle, Bowmanville, Oshawa and Whitby, which receive power from the Port Hope-Oshawa line, and to Wellington and Picton, which receive power from the Trenton-Port Hope line. Lindsay, too, has benefited somewhat, although it has in Fenelon Falls a source of power which can supply a large part of its requirements. The usefulness of this line is not confined to periods of actual line trouble on other sections, as with the additional source of supply, maintenance work on the loop can be done without interruptions to customers, and at a minimum of expense, enabling all sections of line to be kept in better condition. The direct telephone line between Healy Falls and Auburn is of great benefit in system load despatching, as it provides a shorter and better transposed line between Belleville and Auburn. Previously telephone communication between the system operators at Belleville and Auburn generating station was carried on via Trenton and Port Hope with great difficulty, on account of the length and noisy condition of the line; but now the new line provides both an alternative connection in case of trouble and a shorter line over which, under normal conditions, conversation can be carried on without difficulty.

The Healy Falls-Peterboro line is 28 miles long, of wood wish-bone type construction, with 4/0 steel reinforced aluminum power conductors, and 3 strand No. 12 telephone cables. Sectionalizing switches have been installed at Norwood, where provision is made for serving a high-tension station which will supply both Norwood and Havelock, the latter by means of a 4,160-volt line.

Work on the reinsulation of the 44,000-volt lines, which was so actively carried on during the previous year, is now nearly completed. In fact, of the 92





HYDRO-ELECTRIC POWER COMMISSION

OF QUEBEC

ST. LAWRENCE & RIDEAU SYSTEMS.

60 CYCLES

APPROVED
CHIEF ENGINEER

REVISIONS -
OCT 24/27
OCT 28/28
OCT 30/28
OCT 31/28

C-166

SUPPLYING C. 166

-KEY-



Generating Station.



Distributing Station.

Station & Lines in Use.

Station & Lines which are not Commissioned.

Station & Lines under Construction or Proposed.

ST. LAWRENCE SYSTEM

miles of line which could not be done last year, 60 miles have now been completed, and 27 miles originally intended to be reinsulated have been deferred on account of the recent construction of the Healy Falls-Peterboro line, leaving only five miles to be done. The deferred section has given fairly satisfactory service, and since it is now a part of the new loop it can, in case of trouble, be disconnected without interfering with service to any customers.

A station for the supply of power to Lakefield was placed in operation July 19th, together with a 6,600-volt line from Auburn Generating Station. The station is of outdoor type, with 3 outdoor single phase, 6,600 to 2,400-volt transformers of 75 k.v.a. capacity, the oil switches and metering equipment being located in a small adjacent building. Advantage of this line has been taken to serve the County House of Refuge, near Lakefield, by a short tap located near the town.

Coincident with the supply of power to Lakefield, a 6,600-volt 3-phase line from Healy Falls, to supply the Ontario Rock Company at Preneveau, was put into operation.

At Peterboro the possibility of prolonged interruptions to the street railway has been almost entirely eliminated by the installation of an auxiliary starting motor on the 100 k.w. synchronous motor generator set. Previously the railway equipment consisted of a 200 k.w. and a 100 k.w. synchronous motor generator set, and a 100 k.w. induction motor generator set, the latter being the only one which could be started from the A. C. side, and, consequently, if for any reason an interruption occurred on the A. C. side, the equipment could not be started without the induction motor generator set, whereas now, by means of the auxiliary starting motor, a duplicate means of starting has been provided.

An economy in starting motors has been made at the Oshawa synchronous condenser station, where a 35 h.p. and a 40 h.p. motor, formerly used for starting the synchronous condenser, have been replaced by a 75 h.p. motor, which is more satisfactory from an operating standpoint, and it sets free, for use elsewhere, equipment of greater value.

During the period from September 1st to October 17th there was a rather serious shortage of power on the Central Ontario System, due to an unusually low stream flow in the Trent River over which the Commission has no control, the Trent River being a regulated stream, and under the control of the Department of Railways and Canals of the Dominion Government at Ottawa. During the period of shortage the entire flow of the river was utilized to the utmost at all the Commission's plants, and every possible effort was made to obtain power from outside sources, such as the Quaker Oats Company, of Peterboro, who responded generously. The Campbellford town plant and Fenelon Falls town plant also gave what additional assistance they could. Unfortunately the utmost combined output of all these plants failed to meet the demand for power.

Central Ontario System

COMPARISON OF MUNICIPAL LOADS—OCTOBER 1919-1920

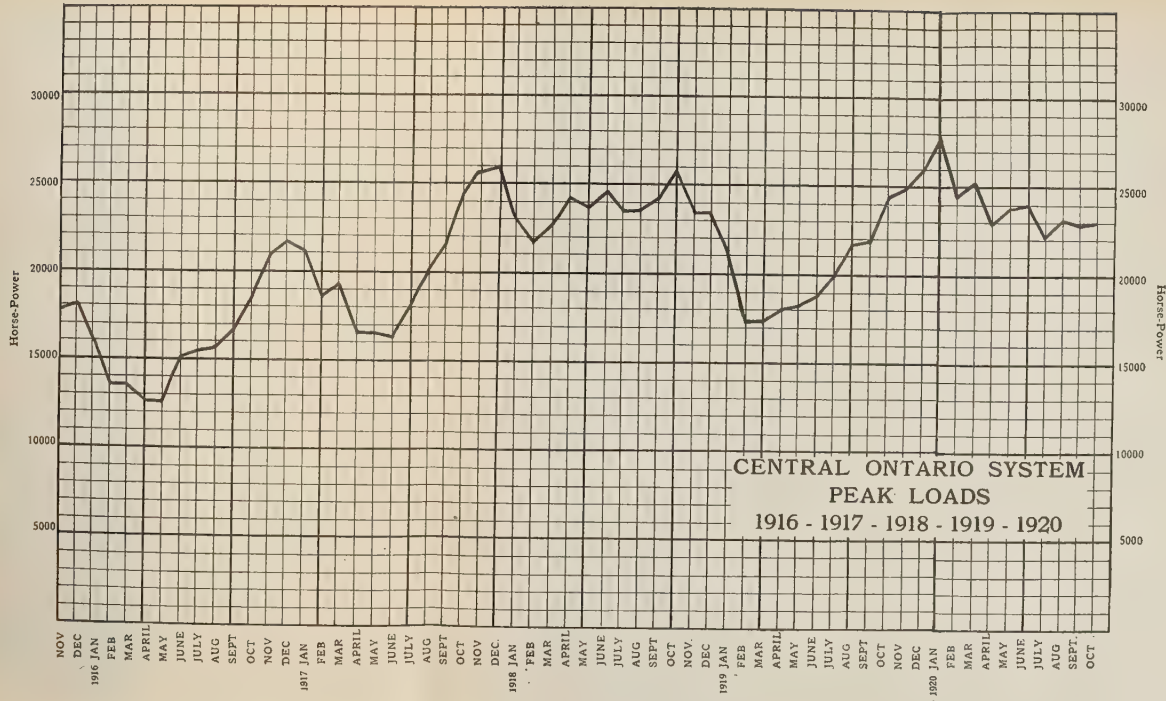
Municipality	Peak Load in H.P., Oct., 1919	Peak Load in H.P., Oct., 1920	Increase
Belleville	1,434	1,689	255
Bloomfield	32	54	22
Bowmanville	1,162	1,206	44
Brighton	82	122	40
Brooklin Rural	117	134	17
Cobourg	643	804	161
Colborne	86	109	23
Deseronto	268	302	34
Kingston	1,710	1,707	—
Lakefield	—	161	161
Lindsay	1,247	1,158	—
Madoc	125	131	6
Millbrook	30	34	4
Napanee	338	374	36
Newcastle	27	37	10
Newburg	434	273	—
Omeme	24	40	16
Orono	27	37	10
Oshawa	2,890	3,307	417
Peterborough	3,320	3,950	630
Picton	205	295	90
Port Hope	410	405	—
Stirling	87	134	47
Trenton	529	593	64
Tweed	105	92	—
Wellington	71	87	16
Whitby	263	424	161

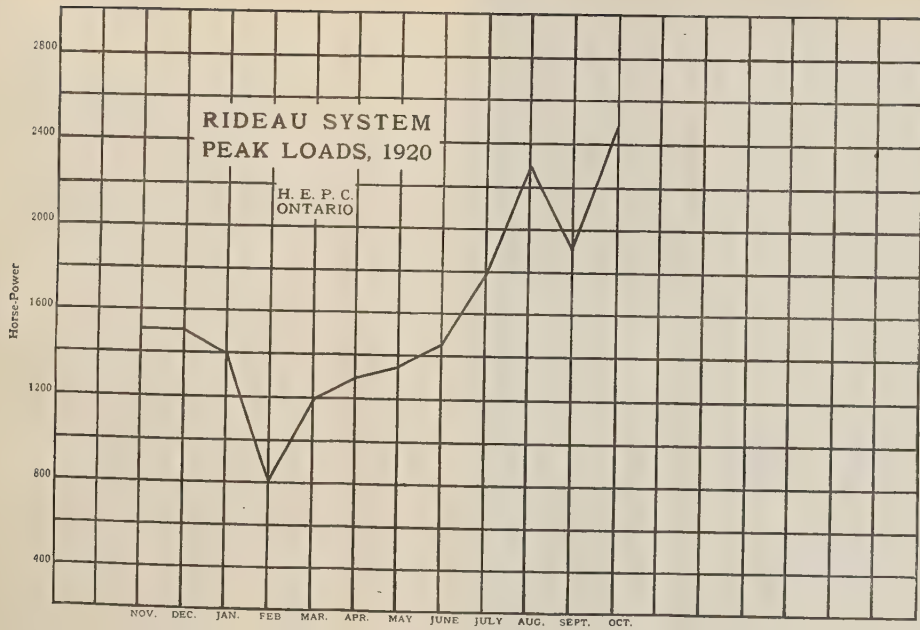
NOTE — Indicates a decrease.

Rideau System

The completion of the new generating station at High Falls, on the Mississippi River, has marked a new era in the operation of the Rideau system, and has, for the first time, enabled the Commission to supply the municipalities of Smith's Falls, Perth and Carleton Place with all the power they require. The station consists of three units, one of which is a single 875 k.v.a. generator direct connected to its turbine, and the other two consist of two 350 k.v.a. generators direct connected to opposite ends of the same turbine shaft. The first-mentioned unit went into service May 1st, and the other two on June 26th. Three 750 k.v.a. three-phase 4,160/26,400-volt transformers are used to step up from the bus voltage of approximately 4,600 volts to a line voltage of approximately 27,000 volts at which power is delivered to the High Falls-Perth line, which had previously been used to deliver power to High Falls for construction purposes. The station operates with a normal net head of 78 feet, and the general layout is simple and convenient for operation and presents throughout a very good appearance.

Situated, as it is, approximately eight miles from the nearest village, it was necessary to provide means of housing the operators. One cottage was built early in the construction period, so that it could be used by the Construction Staff, and it was then thought that further cottages would be built for the operators, but the excessively high prevailing prices made it desirable to defer further cot-





tages for a time. Some of the smaller buildings are at the disposal of the operators who require them, and an effort has been made to utilize local men for operation.

The partial failure of the power supply at Merrickville during the months of February and March, due to insufficient stream flow in the Rideau River, greatly aggravated the need for the High Falls Plant, and the completion, on May 31st, of the temporary arrangements to supply power to Carleton Place from the High-Tension System also called for additional power. Prior to May 31st the Commission's Generating Station at Carleton Place was the only source of power for that town, and it was quite insufficient to meet the needs. However, the three plants operating in parallel from May 31st were able to meet the system demands fairly well (due to the fortunate fact that the Rideau Power Company at Merrickville were temporarily able to supply more power than they were in February and March), pending the completion of the two remaining units at High Falls, which were made available June 26th. From this time onward the High Falls plant has been able to carry the entire system load without difficulty, and to the great satisfaction of all concerned. Smith's Falls benefited particularly, since they were able to discontinue the operation of the local hydraulic plants, and to give full service to all customers requiring power. It is curious to note that the second shortage of power at Merrickville set in immediately after the completion of the High Falls plant, and continued to the end of the year.

Operation of the Carleton Place plant was discontinued as soon as all units at High Falls were in service, and in order to provide for further growth in the system load, and for a standby for any possible contingencies, the hydraulic equipment in the Generating Station was thoroughly overhauled. The runners of both turbines had dropped about 2 inches, due to the wear on the old lignum vitæ thrust bearings. These were replaced, although the construction of the wheels made it exceedingly awkward to do so. It was also necessary to recog the Crown gears, and to rebuild the concrete pedestal which supports the adjacent bearings of the two units, as excessive vibration had practically shaken these bearings to pieces. A number of other repairs of a general nature were made, and the wheels put in shape for operation when required.

The permanent equipment for the Distributing Station at Carleton Place was put into operation October 24th, the high-tension equipment being located in a part of the building which housed the generating equipment, and the low-tension switchboard being located on the generator floor of the generating station.

At Smith's Falls the installation of the permanent cooling water pump and motor has materially reduced the temperature of the transformers which, for several months, had been operating with a temporary and unsatisfactory cooling equipment, due to failure of manufacturers to make delivery of the permanent equipment.

Several little problems in connection with the parallel operation of the plants on the system have arisen and have been successfully met, and, taken altogether, the operation since the advent of High Falls has been very gratifying and shows a rapid increase in the system load, the depression in the load curve during the months of January, February, March and April being due to the partial failure of power supply at Merrickville.

Rideau System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
Smith's Falls	450	1,052	602
Perth	342	558	216
Carleton Place	514	694	180

Nipissing System

The operation of the Nipissing System has been carried on very successfully during the past year with remarkably few interruptions to service, the increasing load being carried without any restrictions on the customers' demands.

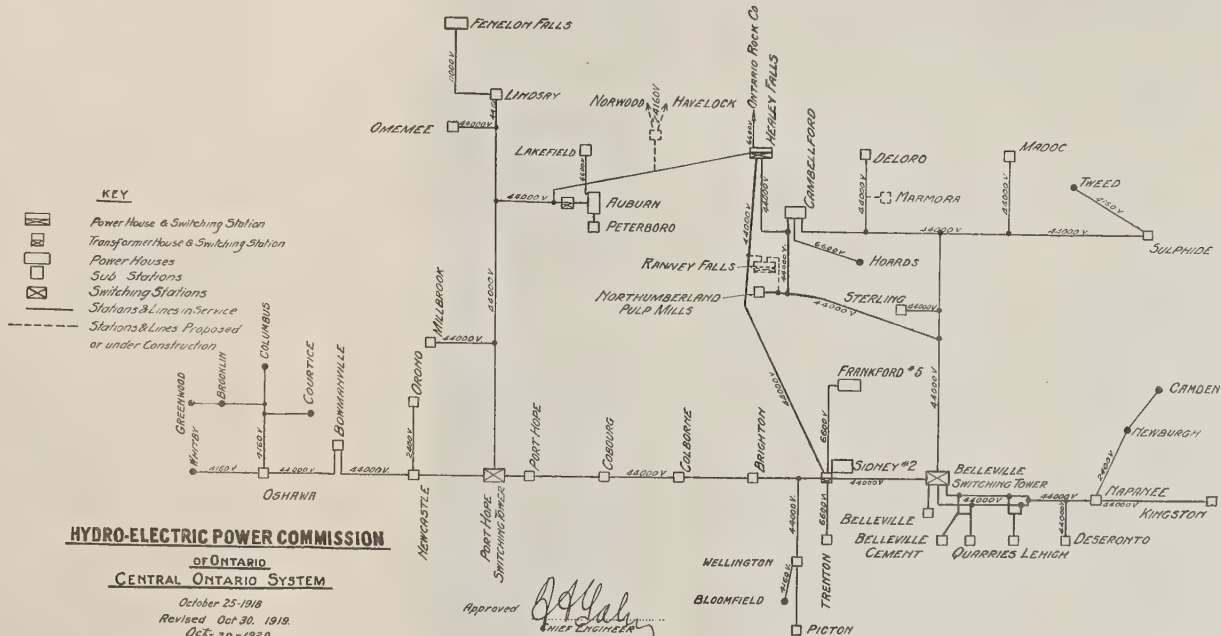
The hydraulic plant generating power for this system is located on the South River about two miles from Nipissing Village, and in the past has been seriously affected by the extreme variation in the flow of the South River. The steam plant is located at North Bay, serving as a standby in emergencies, or as an auxiliary in case of shortage of power. During the low flow periods, it was usually necessary to operate this steam plant to assist the hydraulic plant in carrying the load of the system. In order to overcome this very undesirable condition, storage dams were erected at the outlet of a number of the lakes feeding the South River so that ample water could be stored and the flow in the river regulated to allow for more efficient operation of the Hydraulic Plant at Nipissing. The erection of these storage dams allowing more suitable control of the flow of the river has been a great benefit to this system. Although load was higher than last year it was not necessary to operate the steam plant this summer or fall with the exception of a short time when the hydraulic plant at Nipissing was shut down when the new trash racks were being installed at the headlock to replace the racks damaged by ice several years ago.

A new bridge was erected over the pipe line near the plant in order to transport the heavy equipment in connection with the proposed extension at this plant. Considerable maintenance work was carried out in connection with the wood stave pipe line and headlock controlling same.

The turbine equipment at this plant was overhauled and put in good operating condition.

Nipissing System

Municipality	Load in H.P. October, 1919	Load in H.P. October, 1920	Increase
North Bay	1,134	1,222	88
Powassan	97	84	—
Callander	39	40	1
Nipissing	3	3	—



Thunder Bay System

During the past year very satisfactory operation has been obtained on the Thunder Bay System. The Kaministiquia Power Company have maintained a very good standard of service. Due to the growth of the load taken by Port Arthur, it has been found necessary to increase the power held in reserve from the Kaministiquia Power Company from 6,000 to 7,000 horse-power.

Owing to the growth of the demand for power in certain sections of the city certain changes in the substation equipment would have been advisable, had it not been for the fact that power will be discontinued from the Kaministiquia Power Company shortly and the present equipment will be satisfactory under the new method of supplying power.

The equipment belonging to the Commission on this system has been maintained at the usual degree of high efficiency, the only new work at this station being the marked improvement made in the appearance of the station grounds.

Ottawa System

On the Ottawa System, the Ottawa and Hull Power & Manufacturing Company, who supply, through arrangements with this Commission, the Ottawa Hydro-Electric System, put into operation their new No. 2 Power House during the latter part of August. All power for Ottawa is now normally supplied from this generating station. The change-over from their No. 1 Power House to No. 2 Power House was affected without any interruption to service, the plants operating in parallel for a time, and No. 1 then being cut away. The old No. 1 Power House is still kept as a standby, or second source of supply, and service can be given from that station if necessary.

The Commission owns and maintains graphic metering equipment on the premises of the above company, for the purpose of checking amount of power supplied and load characteristics. Arrangements were made for the necessary alterations in this equipment to meet conditions arising out of the change-over from No. 1 Power House to No. 2 Power House.

The load on the Ottawa System shows some increase, the demand in October of this year being 7,640 horse-power, as compared with 7,450 horse-power in October of the previous year.

SECTION II.

DETAILED STATEMENT OF ASSETS AND LIABILITIES—
31st OCTOBER, 1920

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920

Assets.

Niagara System:	
Right of Way	\$1,482,884 06
Steel Tower Lines	4161,395 25
Transformer Stations	6,295,832 83
Wood Pole Lines	2,553,240 55
	<hr/>
Rural Lines	\$14,493,352 69
	475,665 96
	<hr/>
Thunder Bay System:	
Power Development (Nipigon River)	\$3,547,732 46
Transmission Lines (Nipigon River)	452,129 34
Transformer Station (Port Arthur)	91,082 43
Transmission Line (Port Arthur)	29,476 46
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Severn System:	
Power Development	\$649,767 39
Wood Pole Lines	552,256 60
Transformer Stations	179,250 45
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St. Lawrence System:	
Wood Pole Lines	\$363,712 36
Transformer Stations	277,401 16
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Rural Lines	\$641,113 52
	20 07
	<hr/>
Waddell's System:	
Power Development	\$141,760 06
Wood Pole Lines	153,690 29
Transformer Stations	26,215 08
	<hr/>
Rural Lines	\$321,665 43
	11,281 72
	<hr/>

Liabilities.

Provincial Treasurer:	
Cash Advances for Niagara and other System, Less Contra Account	\$31,779,316 10
Cash Advances for Niagara Power Development Works	22,360,000 00
Unexpended portion of the sum appropriated by the Legislature to cover Expenditures by the Commission on account of the Province....	10,449 00
	<hr/>
Bank of Montreal:	
Electric Railways	300,000 00
Cash Advances re Construction of Third Pipe Line on Ontario Power Company's property	1,200,000 00
Debentures issued to cover purchase of Capital Stock of Ontario Power Company of Niagara Falls.....	8,000,000 00
Debentures issued to cover purchase price of Essex System	225,000 00
Debentures issued to cover purchase price of Thorold System	100,000 00
Debentures issued to cover purchase price of capital stock of Sandwich, Windsor and Amherstburg Railway	2,039,000 00
	<hr/>
Debentures assumed:	
Line to Brich Companies at Streetsville	\$4,765 76
Muskoka Power Development	43,907 47
	<hr/>
Central Ontario System—due thereto.....	48,673 23
Accounts Payable	1,719,472 22
Bond Interest Coupons overdue but not presented	\$354,911 79
	29,478 00
	<hr/>
Insurance Department:	
Outstanding Claims and Awards.	\$244,154 60
Surplus	22,949 25
	<hr/>

332,947 15

1,381,274 44

4,120,420 69

\$14,969,018 65

Eugenia System:

Power Development	979,424 83
Wood Pole Lines	727,460 81
Transformer Stations	206,879 86

\$1,913,765 50
1,694 61

Rural Lines

1,915,460 11

Ottawa System:

Meters, etc.	1,009 57
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Muskoka System:

Power Development	\$148,018 13
Wood Pole Lines	54,313 44
Transformer Stations	9,785 70

Rideau System:

Power Development	\$748,941 41
Wood Pole Lines	233,602 24
Transformer Stations	49,844 27

Bonnechere River Storage System:

Round Lake Dam	\$20,292 68
Golden Lake Dam	11,092 81
Interest on above to 31st Decem- ber, 1916	2,780 25

Essex System:

Purchase price of system	\$226,000 00
Additional expenditure to date ..	149,516 68

Thorold System:

Purchase price of System	\$100,000 00
Less Credit Balance on Current Account	10,817 01

Niagara Power Development Works:

Expenditure to date	26,846,896 22
Shares of capital stock of Sandwich, Windsor and Amherstburg Railway	2,039,000 00
Sandwich Windsor and Amherstburg Railway— current account	216,500 96

Balances due to Municipalities in respect of amounts
paid by them to 31st October, 1920 in excess of
the cost of power supplied to them as provided
to be paid under Section 23 of the Act:

Niagara System	\$519,504 72
Thunder Bay System	28,578 18
Severn System	23,961 91
Rideau System	5,214 13

577,258 94

Reserves for Sinking Fund:

Municipalities—

Niagara System	\$715,912 36
Niagara Rural Lines	46,809 11
Thunder Bay System (Port Ar- thur)	20,446 98
Severn System	39,341 52
Wasdell System	5,296 52
Wasdell Rural Lines	376 71
Eugenia Rural Lines	105 83
Ottawa System	67 73
Bonnechere Storage System	2,480 06
St. Lawrence System	4,639 67

835,476 49

Service and Office Buildings:

Office Buildings	\$40,098 09
Service Buildings	32,046 61

72,144 70

Reserves for Renewals:

Contributed by Municipalities—

Niagara System	\$1,837,262 87
Niagara Rural Lines (Operated by Commission)	5,249 79
Thunder Bay System	39,713 67
Severn System	185,297 02
St. Lawrence System	68,910 67
Wasdell System	31,273 51
Eugenia System	135,762 20
Muskoka System	27,646 18
Rideau System	21,822 21

2,352,938 12

In respect of Service and Office
Buildings:

Service Building	67,929 23
Office Building	7,249 33

75,178 56

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920—Continued

Assets.

Electric Railway Construction:	
Right of Way	\$687,463 04
Construction Material	263,472 46
Surveying and Engineering Account	276,669 31
	<u>1,227,604 81</u>
Service Building and Equipment, Toronto	\$421,602 55
Garage Building and Equipment, Niagara Falls	15,790 92
Equipment, Storehouse and Garage, Hamilton	9,356 19
Pole Yard and Equipment, Cobourg	19,557 91
	<u>466,307 57</u>
Office Building	601,943 70
Office Furniture and Equipment:	
At Toronto Office	\$92,484 92
At Hamilton Office	1,314 59
At Electrical Inspection Office	4,767 90
Library	3,871 61
Stationery and Office Supplies	26,597 71
	<u>129,036 73</u>
Automobiles and Trucks	194,187 47
Inventories:	
Construction and Maintenance, Tools and Equipment	\$256,399 08
Construction Material and Sundry Supplies	783,402 99
Maintenance Material and Supplies	221,712 58
	<u>1,261,514 65</u>
Farm Equipment, Produce, etc.:	
Equipment and Supplies	\$21,006 61
Live Stock and Produce	15,724 00
Expenditures on account 1921 Crops	1,893 00
	<u>38,623 61</u>

Liabilities.

Reserves for Contingencies:	
Niagara System	\$38,514 55
Thunder Bay System	4,254 48
Severn System	5,674 94
St. Lawrence System	1,092 67
Eugenia System	13,430 94
Muskoka System	1,508 80
Rideau System	625 39
	<u>\$65,101 77</u>
Surplus of Interest Account	\$15,418 20
Bond Interest Accrued	32,837 40
	<u>48,255 60</u>
Surplus arising from Departmental Operation in Service Building:	
Storehouse Surplus	29,181 72
Machine Shop Surplus	10,925 37
	<u>40,107 09</u>
Contingent Liabilities—	
In respect of contracts entered into for works under construction	5,096,926 28
Debentures issued in respect of Sandwich, Windsor and Amherstburg Railway (held by Bank of Montreal as collateral security) ..	61,000 00
Debentures issued (including \$1,200,000.00 held by Bank of Montreal as collateral security) in respect of Port Credit-St. Catharines Radial Railway	11,360,363 00

Shares of Capital Stock on Ontario Power Company of Niagara Falls	8,000,000 00
Ontario Power Company of Niagara Falls:	
Expenditure in connection with Construction of Third Pipe Line	3,344,494 33
Current Account	173,178 55
Sinking Fund Investment on deposit with Provincial Treasurer	475,000 00
Interest accrued to date	82,122 64
In Provincial Securities under Section 15 of the Act—par value \$38,500	37,445 10
Investments:	
Debentures of the Hydro-Electric Power Commission purchased (issued in connection with the purchase of Capital Stock of the Ontario Power Company), par value \$115,000	79,844 50
Cash:	
In Banks	303,510 05
In hands of employees as advances on account of expenses	217,506 69
In bank to pay bond interest coupons overdue but not presented	29,478 00
Accounts Receivable:	
Due by Municipalities in respect of construction work and supply sales	320,556 21
Less reserve for doubtful accounts	4,288 65
Due by Municipalities in respect of Power Accounts	725,930 46
"Sinking Fund and Interest" and "Consumers" Accounts owing in respect of Rural Lines.....	13,886 01

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Detailed Statement of Assets and Liabilities—31st October, 1920—Continued

Assets.

Due by users of Water Power
from Bonnechere Storage Sys-
tem

6,252 05

\$1,062,336 08

Balance due by Municipalities in re-
spect of the costs of Power supplied
to them as provided to be paid under
Section 23 of the Act:

Niagara System \$209,049 51
Severn System 40,713 72
St. Lawrence System 34,270 21
Wadell System 20,483 54
Eugenia System 76,877 72
Muskoka System 10,843 51
Rideau System 5,994 35

\$398,232 56

1,460,568 64

2,493 54

Net deficit on Rural Lines operated
by the Commission

Work in Progress:
Expenditures chargeable upon
completion to—

Sundry Municipalities 1,264 88
Capital Construction 74,872 08
Operating and Maintenance
Expenses 7,592 61
Radial Railway Investigation. 44,704 09

128,433 66
40,539 24

Insurance Unexpired

\$72,500,865 46

\$72,500,865 46

NIAGARA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Secs. 6c and 23 of the Act:		Revenue for Period:	
Power Purchased	\$1,966,304 34	Collected from Municipalities.....	\$3,067,479 83
Cost of operating and maintaining Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system	585,098 63	Power sold to Private Companies	570,904 84
Interest on Capital Investment..	644,859 37	Add amounts due by certain Municipalities, being the difference between sums paid and the costs of Power supplied to them in the year ...	\$224,258 63
Provision for Renewal of Lines, Stations, etc.	310,519 12	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the year	111,577 62
Provision for Contingencies:			112,681 01
By charges against Municipalities	\$32,360 68	Revenue	\$3,751,065 68
By charges against contracts with Private Companies which purchase power	5,139 32		
By appropriating the net profit on power sold to Private Companies	11,214 61		
Provision for Sinking Fund:	48,714 61		
By certain Municipalities which were charged therewith upon the expiry of their five-year exemption period	155,794 96		
By charges against contracts with Private Companies which purchased power	39,774 65		
	195,569 61		
	<u>\$3,751,065 68</u>		<u>\$3,751,065 68</u>

NIAGARA

Statements showing the Amount to be paid by each Municipality as the Cost under Section 23 from each Municipality on account of such cost—and the amount credited or charged to it in the year ending

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share Operating Maintenance and Administrative Expenses
	To Dec. 31, 1919	To Oct. 31, 1920				
			\$ c.		\$ c.	\$ c.
Acton	35.00	32.00	23,207 86	175.3	1,889 27	1,151 81
Ailsa Craig	49.00	49.00	42,187 45	121.	1,664 06	1,086 11
Aylmer	38.00	38.00	51,266 47	154.9	1,669 40	1,624 96
Ayr	45.00	50.00	13,922 28	58.7	872 64	771 43
Baden	32.00	32.00	24,118 85	176.9	1,906 51	1,244 88
Beachville	27.00	27.00	30,839 39	260.8	2,810 73	2,207 97
Blenheim	50.00	50.00	36,793 38	122.6	1,321 30	1,865 21
Bolton	43.00	60.00	39,404 28	103.9	1,119 76	774 10
Bothwell	59.26	From Jun. 1 60.00	44,020 34	122.	1,314 84	1,670 42
Brampton	22.00	20.00	74,827 85	911.7	10,125 60	3,595 78
Brantford	18.00	18.00	244,263 66	3,789.2	41,287 56	13,070 46
Breslau			25,568 88	31.2	336 26	694 69
Brigden	57.50	57 50	32,183 86	81.4	877 28	1,124 27
Burford	60.00	70.00	15,282 34	36.5	393 37	916 13
Burgessville	48.00	48.00	6,537 21	22.4	241 41	398 25
Caledonia	24.00	24.00	6,560 37	69.1	744 71	243 08
Chatham	29.00	29.00	232,912 77	1,911.1	21,196 58	10,259 02
Chippawa	35.00	35.00	975 38	42.5	458 03	174 16
Clinton	43.00	43.00	46,064 00	171.7	1,850 47	1,667 31
Comber	60.00	60.00	30,880 39	84.9	915 00	1,111 59
Dashwood	56.00	56.00	20,825 02	46.9	505 46	497 32
Delaware	50.00	85.00	4,122 87	9.5	102 38	170 45
Dereham Twp.	37.00	37.00	7,842 64	56.7	611 07	785 31
Dorchester	50.00	50.00	4,839 53	23.2	250 04	316 29
Drayton	60.00	65.00	26,429 65	45.9	494 68	709 61
Dresden	42.00	38.00	34,771 07	211.9	2,283 72	1,723 56
Drumbo	45.00	60.00	3,576 78	18.1	195 07	183 59
Dublin	48.00	60.00	8,327 60	24.7	266 20	603 20
Dundas	14.00	14.00	43,159 62	1,153.3	12,429 51	2,437 64
Dunnville	27.77	35.00	86,519 69	236.9	2,553 15	1,191 24
Dutton	43.00	40.00	19,555 60	99.4	1,071 27	1,024 00
Elmira	38.00	38.00	38,223 01	199.2	2,746 84	1,334 03
Elora	40.00	40.00	39,212 62	195.1	2,102 66	1,270 64
Embro	60.00	75.00	18,095 48	42.	452 65	910 43
Etobicoke Twp.	27.00	27.00	22,154 18	274.6	2,959 46	1,232 44
Exeter	41.00	41.00	42,933 46	153.7	1,656 48	1,242 29
Fergus	40.00	40.00	32,391 69	149.1	1,606 90	1,481 96
Forest	63.00	63.00	46,584 21	110.	1,185 51	1,473 78
Galt	20.00	20.00	202,222 10	2,473.6	27,558 83	10,666 70
Georgetown.....	36.00	35.00	83,173 36	482.7	5,802 21	2,927 74
Glencoe.....		78.35	26,365 68	10.4	112 08	128 72
Goderich	43.00	43.00	145,637 04	417.3	4,797 39	4,006 39
Granton	48.00	55.00	13,039 62	41.	441 87	629 42
Guelp	19.00	19.00	189,850 31	3,358.	38,290 29	13,247 73
Hagersville	34.00	36.00	37,916 76	229.6	2,474 47	1 395 86

SYSTEM

of the Act—of Power supplied to it by the Commission—the Amount received by the Commis-
each Municipality upon ascertaining by annual adjustment the actual cost of power supplied to
October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as pro- vided to be paid under Section 23 of Act	Amounts paid to Commis- sion by each muni- cipality	Amount credited or charged to each Muni- cipality upon ascer- taining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contingencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
1,047 61	550 23	37 49	441 55	5,117 36	5,691 61	574 25	.....	1919
1,466 08	783 70	25 88	.....	5,025 83	6,290 93	1,265 10	.....	.....
2,330 87	1,247 55	33 13	.....	6,905 91	5,888 73	.....	1,017 18	.....
623 30	334 80	12 55	202 38	2,817 10	3,020 66	203 56	.....	1917
1,084 86	564 17	37 83	430 73	5,268 98	5,554 74	285 76	.....	1919
1,379 02	718 15	55 77	511 76	7,683 40	7,041 31	.....	642 09	1919
1,658 12	859 78	26 22	.....	5,730 63	6,048 61	317 98	.....	.....
1,788 04	952 03	22 22	.....	4,656 15	5,962 70	1,306 55	.....	.....
1,927 07	1,007 63	26 09	.....	5,946 05	7,013 37	1,067 32	.....	.....
3,409 20	1,613 74	194 99	1,233 50	20,172 81	20,244 69	71 88	.....	1920
10,426 63	5,251 89	810 40	2,781 47	73,628 41	68,656 92	.....	4,971 49	1917
1,164 51	634 21	6 67	464 60	3,300 94	2,393 92	.....	907 02	1919
1,459 03	767 41	17 41	.....	4,245 40	4,678 20	432 80	.....	.....
689 34	373 81	7 80	.....	2,380 45	2,481 41	100 96	.....	.....
290 12	155 90	4 79	.....	1,090 47	1,074 17	.....	16 30	.....
296 96	158 45	14 78	101 87	1,559 85	1,659 80	99 95	.....	1919
10,446 94	4,950 16	408 73	.....	47,261 43	56,234 88	8,973 45	.....	.....
44 43	24 39	.....	.....	701 01	1,488 93	787 92	.....	.....
2,072 47	1,091 65	36 72	607 48	7,326 10	6,949 18	.....	376 92	1917
1,374 41	719 53	18 16	.....	4,138 69	4,846 00	707 31	.....	.....
945 55	510 84	10 03	.....	2,469 20	2,630 59	161 39	.....	.....
187 66	101 35	2 03	.....	563 87	756 82	192 95	.....	.....
353 02	185 34	12 12	.....	1,946 86	1,865 08	.....	81 78	.....
220 07	116 77	4 96	67 33	975 46	1,162 07	186 61	.....	1917
1,201 86	647 37	9 81	.....	3,063 33	2,933 44	.....	129 89	.....
1,556 21	767 23	45 32	.....	6,376 04	7,770 32	1,394 28	.....	.....
159 58	85 33	3 87	122 56	750 00	981 75	231 75	.....	1917
378 25	201 02	5 28	.....	1,453 95	1,422 61	.....	31 34	.....
1,945 79	992 30	246 66	768 92	18,820 82	16,227 19	.....	2,593 63	1920
3,932 52	2,158 35	50 67	.....	9,885 93	7,951 61	.....	1,934 32	.....
878 54	461 81	21 26	.....	3,456 88	3,934 70	477 82	.....	.....
1,662 47	877 23	42 60	576 18	7,239 35	8,170 56	931 21	.....	1918
1,782 95	951 38	41 73	600 52	6,749 88	7,722 59	972 71	.....	1917
821 16	444 45	8 98	349 04	2,986 71	2,972 11	.....	14 60	1917
994 44	451 73	58 73	.....	5,696 80	7,414 64	1,717 84	.....	.....
1,945 87	1,041 37	32 87	.....	5,918 88	6,301 30	382 42	.....	.....
1,472 38	787 33	31 89	540 12	5,920 58	5,964 63	44 05	.....	1917
2,099 87	1,107 41	23 53	.....	5,890 10	6,890 78	1,000 68	.....	.....
9,200 32	4,659 01	529 03	3,635 39	56,249 28	54,473 23	.....	1,776 05	1920
3,773 40	2,003 75	103 24	1,296 90	15,907 24	17,432 44	1,525 20	.....	1918
245 57	130 50	2 22	.....	619 09	819 41	200 32	.....	.....
6,601 08	3,511 62	89 25	1,894 95	20,900 68	17,720 59	.....	3,180 09	1917
591 01	317 27	8 77	.....	1,988 34	2,210 71	222 37	.....	.....
8,636 64	4,272 23	718 18	3,412 95	68,578 02	65,903 33	.....	2,674 69	1920
1,718 87	928 34	49 10	532 10	7,098 74	7,992 70	893 96	.....	1918

NIAGARA

Statement showing the Amount to be paid by each Municipality as the Cost under Section 23 from each Municipality on account of such cost—and the amount credited or charged to supplied to it in the year

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share Operating Maintenance and Adminis- trative Expenses
	To Dec, 31, 1919	To Oct. 31, 1920				
			\$ c.		\$ c.	\$ c.
Hamilton	14.00	14.00	632,263 87	17,415.5	195,192 93	27,935 34
Harriston	48.00	52.00	62,801 97	233.5	2,516 51	3,070 03
Hensall	47.00	55.00	25,161 37	55.4	597 08	633 74
Hespeler	21.00	21.00	34,055 30	379.4	4,088 93	1,802 92
Highgate	51.00	51.00	16,808 55	46.4	500 07	724 72
Ingersoll	23.00	21.00	90,732 00	1,057.	11,391 66	5,343 61
Kitchener	19.00	19.00	386,675 68	6,054.9	71,255 74	21,086 70
Lambeth	50.00	85.00	8,896 73	20.5	220 94	333 78
Listowel	37.00	37.00	85,752 47	440.4	5,346 34	4,342 89
London	19.00	19.00	748,411 80	11,056.3	123,057 64	35,014 22
London and Port Stanley Rly....	12.00+ 45c. per kwh	15.00+ 1c. per kwh	146,349 08	1,197.5	12,905 87	17,016 96
Lucan	40.00	40.00	30,413 88	181.8	1,959 32	1,345 97
Lynden	40.00	50.00	23,866 56	92.9	1,001 21	989 22
Markham.....	.....	77.74	21,379 84	20.4	470 51	45 95
Milton	28.00	28.00	81,940 11	720.7	8,247 24	2,690 81
Milverton	35.00	35.00	46,794 05	284.3	3,364 00	2,622 54
Mimico	25.00	21.00	24,510 01	303.8	3,274 15	1,004 89
Mitchell	36.00	36.00	30,589 05	182.6	1,967 94	1,558 38
Moorefield	63.00	70.00	13,688 20	26.5	285 60	469 31
Mt. Brydges	50.00	70.00	10,632 65	24.5	264 05	410 70
New Hamburg	32.00	32.00	32,027 31	221.4	2,386 10	1,375 41
New Toronto	25.00	20.00	345,739 95	3,852.2	43,016 49	17,379 96
Niagara Falls	11.50	11.50	27,894 52	3,091.7	33,500 31	2,088 80
Niagara-on-the-Lake	28.00	28.00	7,107 59	165.8	1,786 89	1,895 46
Norwich	35.00	35.00	32,791 25	226.9	2,445 38	2,000 05
Oil Springs	38.00	43.00	29,140 11	113.2	1,220 00	981 53
Otterville	50.00	50.00	9,007 30	34.8	375 04	470 20
Palmerston	45.00	50.00	29,700 97	129.	1,390 27	1,623 99
Paris	20.00	19.00	48,781 23	660.6	7,119 51	2,700 42
Parkhill.....	.....	75.23	26,912 87	22.2	239 26	262 28
Petrolia	36.00	36.00	78,874 88	463.6	5,296 38	3,596 52
Petersburg and St. Agatha District	.....	.....	13,710 35	19.5	210 15	622 51
Plattsville	60.00	65.00	26,075 86	79.5	856 80	894 34
Port Credit	25.00	23.00	8,496 50	90.4	974 27	491 26
Port Stanley	53.03	53.00	38,117 60	165.4	1,782 58	2,337 44
Preston	19.00	19.00	105,765 36	1,418.9	15,291 97	5,769 51
Princeton	70.00	85.00	7,779 92	11.8	127 17	216 83
Ridgetown	47.00	47.00	39,694 73	162.6	1,752 39	1,988 40
Rockwood	38.00	55.00	12,606 80	50.4	543 18	661 21
Rodney	63.00	63.00	15,342 87	53.2	573 36	659 83
St. George	45.00	45.00	15,699 38	58.1	626 17	476 23
St. Jacobs	32.00	32.00	11,180 95	68.3	736 09	566 71

SYSTEM—Continued

of the Act—of Power supplied to it by the Commission—the Amount Received by the Commission each Municipality upon ascertaining by annual adjustment the actual cost of Power ending October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as pro- vided to be paid under Section 23 of Act	Amounts paid to Commis- sion by each Muni- cipality	Amount credited or charged to each Muni- cipality upon ascer- taining the cost of power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contin- gencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
28,495 66	14,497 42	3,724 79	11,260 64	281,106 78	256,050 15	.....	25,056 63	1920
2,850 33	1,502 06	49 94	.....	9,988 87	11,143 62	1,154 75	.....	.....
1,142 58	617 51	11 85	.....	3,002 76	2,985 65	.....	17 11	.....
1,549 54	790 56	81 14	612 33	8,925 42	8,370 85	.....	554 57	1920
759 85	398 01	9 92	.....	2,392 57	2,364 81	.....	27 76	.....
4,054 52	2,068 38	226 06	1,602 23	24,686 46	23,660 68	.....	1,025 78	1920
17,585 61	8,582 13	1,294 98	6,949 31	126,754 47	122,730 47	.....	4,024 00	1920
404 92	218 69	4 38	.....	1,182 71	1,626 04	443 33	.....	.....
3,772 50	1,953 00	94 19	.....	15,508 92	16,721 34	1,212 42	.....	.....
33,922 78	16,703 88	2,364 69	13,405 27	224,468 48	213,970 95	.....	10,497 53	1920
6,6 2 17	3,383 64	256 11	2,546 90	42,721 65	40,919 60	.....	1,802 05	1917
1,372 25	721 67	38 88	.....	5,438 09	7,214 96	1,776 87	.....	.....
1,077 29	585 18	19 87	.....	3,672 77	4,387 22	714 45	.....	.....
568 08	311 81	.....	.....	1,396 35	1,587 82	191 47	.....	.....
3,727 83	1,842 54	154 14	913 90	17,576 46	20,313 66	2,737 20	.....	1918
2,110 32	1,082 57	60 80	.....	9,240 03	9,993 94	753 91	.....	.....
1,100 21	499 77	64 97	289 77	6,233 76	6,578 41	344 65	.....	1919
1,362 60	699 13	39 05	538 46	6,165 56	6,573 90	408 34	.....	1920
622 30	334 46	5 66	.....	1,717 33	1,820 66	103 33	.....	.....
483 92	261 36	5 24	.....	1,425 27	1,492 82	67 55	.....	.....
1,448 66	755 98	47 35	572 47	6,585 97	6,840 35	254 38	.....	1920
15,657 06	7,273 73	823 88	1,177 75	85,328 87	81,424 41	.....	3,904 46	1917
1,273 68	699 06	661 23	.....	38,223 08	35,734 47	.....	2,488 61	.....
313 58	172 11	35 46	.....	4,203 50	4,592 13	388 63	.....	.....
1,425 81	748 86	48 53	487 48	7,156 11	7,940 76	784 65	.....	1919
1,317 76	676 84	24 21	.....	4,220 34	4,504 08	283 74	.....	.....
398 91	213 78	7 44	.....	1,465 37	1,679 22	213 85	.....	.....
1,347 18	704 96	27 59	.....	5,093 99	6,356 36	1,262 37	.....	.....
2,100 01	1,070 51	141 28	424 14	13,555 87	12,662 28	.....	893 59	1917
703 96	382 52	4 75	.....	1,592 77	1,646 30	53 53	.....	.....
3,553 32	1,760 15	99 15	.....	14,305 52	16,990 96	2,685 44	.....	.....
622 99	338 42	4 17	254 46	2,052 70	1,360 77	.....	691 93	1919
1,173 07	633 96	17 00	461 85	4,037 02	5,087 71	1,050 69	.....	1917
377 69	181 78	19 33	98 21	2,142 54	2,111 55	.....	30 99	1918
1,715 06	907 40	35 37	624 20	7,402 05	8,766 11	1,364 06	.....	1919
4,811 35	2,416 67	303 46	1,901 30	30,494 26	27,059 16	.....	3,435 10	1920
352 21	191 84	2 52	186 96	1,077 53	867 73	.....	209 80	1917
1,787 81	914 56	34 77	.....	6,477 93	7,515 43	1,037 50	.....	.....
568 49	304 99	10 78	217 11	2,305 76	2,461 24	155 48	.....	1918
697 39	371 86	11 38	.....	2,313 82	3,348 85	1,035 03	.....	.....
704 37	379 38	12 42	.....	2,198 57	2,321 23	122 66	.....	.....
502 97	263 98	14 60	.....	2,084 35	2,186 39	102 04	.....	.....

NIAGARA

Statement showing the Amount to be Paid by each Municipality as the Cost under Section 23 mission from each Municipality on account of such cost—and the amount credited of power supplied to it in the

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commission	Share
	To Dec. 31, 1919	To Oct. 31, 1920				Operating, Maintenance and Adminis- trative Expenses
			\$ c.		\$ c.	\$ c.
St. Mary's	28.00	28.00	83,744 48	623.8	6,722 91	5,649 87
St. Thomas	24.00	24.00	214,019 28	2,373.7	26,482 18	12,816 34
Sarnia	38.00	36.00	474,305 52	2,690.0	32,291 04	19,756 08
Seaforth	38.00	36.00	67,920 92	336.5	3,626 57	2,793 07
Scarboro Township		25.00	15,181 39	48.5	1,118 50	143 19
Simcoe	32.00	28.00	23,659 69	186.7	2,012 13	870 63
Springfield	65.00	65.00	11,630 04	30.3	326 56	632 53
Stamford Twp.	15.00	15.00	6,004 87	354.2	3,817 34	1,029 47
Stratford	25.00	25.00	190,818 72	1,766.1	19,993 86	11,042 32
Strathroy	42.00	40.00	73,335 67	329.	3,545 75	1,787 31
Streetsville			35,021 49	220.8	2,464 15	1,516 78
Tavistock	36.00	35.00	48,253 68	254.2	2,859 60	2,205 91
Thamesford	50.00	55.00	20,477 74	84.1	906 37	946 02
Thamesville	50.00	60.00	15,583 42	54.	581 98	741 06
Thorndale	50.00	60.00	19,562 31	72.2	778 12	1,150 97
Tilbury	45.00	50.00	21,267 24	91.	980 74	943 66
Tillsonburg	32.00	30.00	84,358 87	663.5	7,150 76	4,700 46
Toronto	14.50	14.50	3,106,915 33	56,620.3	619,216 40	90,080 78
Toronto Twp.	25.00	25.00	17,738 96	204.2	2,200 73	1,144 84
Walkerville	36.00	36.00	563,080 74	3,327.9	41,865 92	19,127 70
Wallaceburg	38.00	38.00	138,733 48	806.6	8,843 00	5,789 89
Waterdown	26.00	26.00	15,672 65	107.2	1,155 34	755 59
Waterford	39.00	33.00	18,497 12	132.	1,422 61	883 88
Waterloo	21.00	20.00	79,498 94	1,185.2	12,773 31	4,351 74
Watford	65.00	85.00	39,397 07	57.	614 30	1,274 37
Welland	14.00	14.00	119,945 00	3,077.5	33,167 27	3,438 05
Wellesley	39.00	39.00	28,051 31	117.2	1,263 10	1,045 39
Weston	25.00	23.00	88,435 79	983.3	10,597 36	3,795 68
West Lorne	55.00	55.00	18,128 60	81.7	880 51	964 14
Windsor	36.00	36.00	547,957 18	3,240.8	38,407 21	19,328 98
Woodbridge	33.00	31.00	24,667 87	152.7	1,645 70	1,149 63
Woodstock.....	20.00	20.00	100,992 42	1,584.7	17,978 85	7,183 89
Wyoming	38.00	60.00	13,115 64	37.2	400 92	509 16
Zurich	69.00	60.00	30,795 46	61.	657 41	615 38
Totals-Municipalities			12,060,526 96		1,684,850 96	504,908 30
Totals-Companies ...			2,244,062 64		281,453 38	80,190 33
Non-operating Capital			188,763 09			
Grand Total....			14,493,352 69		1,966,304 34	585,098 63

SYSTEM—Continued

of the Act—of Power supplied to it by the Commission—the Amount received by the Com-
or charged to each Municipality upon ascertaining by Annual Adjustment the actual cost
year ending October 31, 1920

of Operating Costs & Fixed Charges				Total Cost of Power for year as pro- vided to be paid under Section 23 of Act	Amounts paid to Commis- sion by each Muni- cipality	Amount credited or charged to each Muni- cipality upon ascer- taining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Interest	Renewals	Contingencies	Sinking Fund			Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
3,799 43	1,842 93	133 41	1,501 42	19,649 97	17,467 40	.....	2,182 57	1920
9,682 82	4,827 90	507 67	3,826 37	58,143 28	58,224 83	81 55	.....	1920
21,375 47	10,628 89	575 31	.....	84,626 79	101,025 29	16,398 50	.....	.....
3,063 50	1,591 58	71 97	1,210 61	12,357 30	12,242 70	.....	114 60	1920
403 37	221 37	.....	.....	1,886 43	1,213 32	.....	673 11	.....
1,027 65	540 83	39 93	.....	4,491 17	5,356 51	865 34	.....	.....
527 47	285 00	6 48	.....	1,778 04	1,857 35	79 31	.....	.....
273 87	150 31	75 75	.....	5,346 74	5,002 85	.....	343 89	.....
8,613 72	4,256 27	377 72	3,403 88	47,687 77	45,112 34	.....	2,575 43	1920
3,335 45	1,773 68	70 36	1,189 60	11,702 15	12,801 35	1,099 20	.....	1917
1,557 79	792 67	47 22	588 05	6,966 66	9,593 54	2,626 88	.....	1920
2,173 37	1,125 00	54 37	.....	8,418 25	9,065 03	646 78	.....	.....
931 46	496 66	17 98	258 81	3,557 30	4,541 28	983 98	.....	1917
705 24	364 92	11 55	.....	2,404 75	3,150 99	746 24	.....	.....
880 03	470 50	15 44	517 84	3,812 90	4,199 53	386 63	.....	1917
982 76	502 07	19 46	.....	3,428 69	4,379 07	950 38	.....	.....
3,783 66	1,978 14	141 90	1,495 19	19,250 11	19,396 74	146 63	.....	1920
141,683 16	58,211 55	12,109 61	46,964 50	968,266 00	829,994 45	.....	138,271 55	1920
794 05	378 17	43 67	219 13	4,780 59	5,030 40	249 81	.....	1918
25,550 65	11,742 86	711 74	13,787 19	112,786 06	126,172 52	13,386 46	.....	1917
6,340 95	3,149 48	172 51	.....	24,295 83	30,800 85	6,505 02	.....	.....
703 59	379 13	22 92	278 05	3,294 62	2,745 00	.....	549 62	1920
807 26	426 66	28 23	.....	3,568 64	4,226 25	657 61	.....	.....
3,615 81	1,775 15	253 49	1,428 87	24,198 37	23,962 57	.....	235 80	1920
1,789 66	958 88	12 19	.....	4,649 40	4,449 16	.....	200 24	.....
5,466 58	3,000 32	658 19	.....	45,730 41	43,084 92	.....	2,645 49	.....
1,268 63	675 58	25 06	.....	4,277 76	4,520 63	242 87	.....	.....
4,029 07	1,933 74	210 30	1,469 48	22,035 63	22,928 48	892 85	.....	1920
823 52	435 24	17 47	.....	3,120 88	4,280 36	1,159 48	.....	.....
24,864 23	11,425 82	693 11	10,485 14	105,204 49	120,649 36	15,444 87	.....	1917
1,113 58	568 08	32 66	302 32	4,811 97	4,740 81	.....	71 16	1917
4,482 80	2,225 09	338 92	1,771 47	33,981 02	32,593 15	.....	1,387 87	1920
594 32	310 95	7 96	.....	1,823 31	2,100 12	276 81	.....	.....
1,398 88	757 22	13 04	.....	3,441 93	3,759 68	317 75	.....	.....
543,155 88	259,090 06	32,360 68	155,794 96	3,180,160 84	3,067,479 83	111,577 62	224,258 63	.....
101,703 49	51,429 06	5,139 32	39,774 65	559,690 23	570,904 84	11,214 61	.....	.....
.....
644,859 37	310,519 12	37,500 00	195,569 61	3,739,851 07	3,638,384 67	122,792 23	224,258 63	.....

NIAGARA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919	\$15,762 48
Added during the year ending 31st October, 1920:	
Amount charged to Municipalities as part of the cost of power delivered to them	\$32,360 68
Provision against equipment employed in respect of con- tracts with sundry power customers	5,139 32
Net profits from contracts with sundry power customers applied to Reserve for Contingencies	11,214 61
Profits to October 31, 1919, on contracts with sundry power customers, not previously applied	16,104 00
Interest at 4% per annum on monthly balances at the credit of the account	1,510 10
	66,328 71
	\$82,091 19
Deduct:	
Expenditures to cover contingencies met with during the year ending 31st October, 1920	43,576 64
Balance carried forward 31st October, 1920	\$38,514 55

NIAGARA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919	1,623,123 16
Deduct expenditures to 31st October, 1919	130,009 70
Balance brought forward 31st October, 1919	\$1,493,113 46
Added during the year ending 31st October, 1920:	
Amounts charged to Municipalities as part of the cost of power delivered to them	\$260,175 91
Provision against equipment employed in respect of con- tracts with sundry companies	50,343 21
Interest at 4% per annum on the monthly balances to the credit of the account	59,724 54
Renewals Reserve provided on second hand equipment purchased	435 59
	370,679 25
	\$1,863,792 71
Expenditures during the year ending 31st October, 1920	26,529 84
Balance carried forward 31st October, 1920	\$1,837,262 87

NIAGARA SYSTEM.

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—Sinking Fund Requirements, Payment of which has been Deferred by the Commission under Section 23 of the Act. Sinking Fund Payments made by certain Municipalities which have been operating more than Five Years, and the Total of such Sinking Fund Payments, including Interest allowed thereon, to October 31, 1920.

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act. Sinking Fund Payments made by certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been	
	(a) For Period of	(b) Amount	(a) For Period of	
Acton	4 years ending Oct. 31, 1920	\$ 1,717 15	1 year ending Oct. 31, 1920	
Ailsa Craig	4 " " " "	1,866 49	4 " " " "	
Aylmer	3 " " " "	2,398 01	3 " " " "	
Ayr	4 " " " "	923 72	3 " " " "	
Baden	4 " " " "	1,827 92	1 " " " "	
Beachville	4 " " " "	1,947 08	1 " " " "	
Blenheim	4 " " " "	2,688 72	4 " " " "	
Bolton	4 " " " "	2,755 29	4 " " " "	
Bothwell	4 " " " "	2,847 47	4 " " " "	
Brampton	4 " " " "	4,519 70	.....
Brantford	4 " " " "	13,065 08	3 years ending Oct. 31, 1920	
Breslau Dist.....	7 " " " "	2,758 46	1 " " " "	
Brigden	3 " " " "	1,577 10	3 " " " "	
Burford	4 " " " "	1,124 86	4 " " " "	
Burgessville	4 " " " "	410 39	4 " " " "	
Caledonia	4 " " " "	442 81	1 " " " "	
Chatham	4 " " " "	14,398 18	4 " " " "	
Chippawa Village.	2 " " " "	20 48	2 " " " "	
Clinton	4 " " " "	2,734 21	3 " " " "	
Comber	4 " " " "	1,517 82	4 " " " "	
Dashwood	4 " " " "	1,351 81	4 " " " "	
Delaware	4 " " " "	295 88	4 " " " "	
Dereham Twp. ..	2 " " " "	169 07	2 " " " "	
Dorchester	4 " " " "	315 00	3 " " " "	
Drayton	3 " " " "	1,393 92	3 " " " "	
Dresden	4 " " " "	1,950 85	4 " " " "	
Drumbo	4 " " " "	374 41	3 " " " "	
Dublin	4 " " " "	488 56	4 " " " "	
Dundas	4 " " " "	3,809 96	.....
Dunnville	3 " " " "	3,520 70	3 years ending Oct. 31, 1920	
Dutton	4 " " " "	1,345 93	4 " " " "	
Elmira	4 " " " "	2,465 05	2 " " " "	
Elora	4 " " " "	2,758 97	3 " " " "	
Embro	4 " " " "	1,292 90	3 " " " "	
Etobicoke Twp.	4 " " " "	915 64	4 " " " "	
Exeter	4 " " " "	4,851 26	4 " " " "	
Fergus	4 " " " "	2,177 54	3 " " " "	
Forest	4 " " " "	3,253 20	4 " " " "	
Galt	4 " " " "	14,096 61	.....
Georgetown	4 " " " "	5,501 38	2 years ending Oct. 31, 1920	
Glencoe.....	1 " " " "	97 04	1 " " " "	
Goderich	4 " " " "	9,225 29	3 " " " "	
Granton	4 " " " "	901 43	4 " " " "	
Guelph.....	4 " " " "	12,758 87	.....
Hagersville	4 " " " "	2,352 44	2 years ending Oct. 31, 1920	
Hamilton	4 " " " "	36,536 94	.....

SYSTEM

Sinking Fund Requirements, Payment of which, has been Deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to 31 October, 1920

the Payment Deferred	Sinking Fund Requirements Paid (or Charged) as Part of the Cost of Power		Interest at 4% per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October, 1920
	(b) Amount	(a) For Period of		
\$ c.			\$ c.	\$ c.
413 75	3 years ending Oct. 31, 1919.....	1,303 40	50 72	1,354 12
1,866 49	.....	.....	.....	.....
2,398 01	.....	.....	.....	.....
721 34	1 year ending Oct. 31, 1917.....	202 38	.....	202 38
428 71	3 " " " 1919.....	1,399 21	59 62	1,458 83
544 95	3 " " " 1919.....	1,402 13	52 04	1,454 17
2,688 72	.....	.....	.....	.....
2,755 29	.....	.....	.....	.....
2,847 47	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	4,519 70	273 15	4,792 85
10,283 61	1 " " " 1917.....	2,781 47	.....	2,781 47
460 18	6 " " " 1919.....	2,298 28	315 70	2,613 98
1,577 10	.....	.....	.....	.....
1,124 86	.....	.....	.....	.....
410 39	.....	.....	.....	.....
117 35	3 years ending Oct. 31, 1919.....	325 46	13 31	338 77
14,398 18	.....	.....	.....	.....
20 48	.....	.....	.....	.....
2,126 73	1 year ending Oct. 31, 1917.....	607 48	.....	607 48
1,517 82	.....	.....	.....	.....
1,351 81	.....	.....	.....	.....
295 88	.....	.....	.....	.....
169 07	.....	.....	.....	.....
247 67	1 year ending Oct. 31, 1917.....	67 33	.....	67 33
1,393 92	.....	.....	.....	.....
1,950 85	.....	.....	.....	.....
251 85	1 year ending Oct. 31, 1917.....	122 56	.....	122 56
488 56	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	3,809 96	241 06	4,051 02
3,520 70	.....	.....	.....	.....
1,345 93	.....	.....	.....	.....
1,281 67	2 years ending Oct. 31, 1918.....	1,183 38	24 29	1,207 67
2,158 45	1 " " " 1917.....	600 52	.....	600 52
943 86	1 " " " 1917.....	349 04	.....	349 04
915 64	.....	.....	.....	.....
4,851 26	.....	.....	.....	.....
1,637 42	1 year ending Oct. 31, 1917.....	540 12	.....	540 12
3,253 20	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	14,096 61	825 78	14,922 39
2,909 51	2 " " " 1918.....	2,591 87	51 80	2,643 67
97 04	.....	.....	.....	.....
7,330 34	1 year ending Oct. 31, 1917.....	1,894 95	.....	1,894 95
901 43	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	12,758 87	754 47	13,513 34
1,321 54	2 " " " 1918.....	1,030 90	19 95	1,050 85
.....	4 " " " 1920.....	36,536 94	1,885 33	38,422 27

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act.—Sinking Fund Payments made by Certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been	
	(a) For Period of	(b) Amount	(a) For Period of	
		\$ c.		
Harriston	4 years ending Oct. 31, 1920	3,321 48	4 years ending Oct. 31, 1920	
Hensall	4 " " " "	2,285 46	4 " " " "	
Hespeler	4 " " " "	2,248 22	.....
Highgate	4 " " " "	1,306 99	4 years ending Oct. 31, 1920	
Ingersoll	4 " " " "	5,857 72	.....
Kitchener	4 " " " "	23,969 69	.....
Lambeth	4 " " " "	600 09	4 years ending Oct. 31, 1920	
Listowel	4 " " " "	4,446 72	4 " " " "	
London	4 " " " "	48,771 06	.....
London and Pt. Stanley Rly....	4 " " " "	10,368 64	3 years ending Oct. 31, 1920	
Lucan	4 " " " "	1,829 90	4 " " " "	
Lynden	4 " " " "	1,790 18	4 " " " "	
Markham.....	1 " " " "	205 61	1 " " " "	
Milton	4 " " " "	4,248 07	2 " " " "	
Milverton	4 " " " "	2,955 33	4 " " " "	
Mimico	4 " " " "	1,249 57	1 " " " "	
Mitchell	4 " " " "	2,090 85	.....
Moorefield	3 " " " "	695 75	3 years ending Oct. 31, 1920	
Mount Brydges ..	4 " " " "	857 59	4 " " " "	
New Hamburg ..	4 " " " "	2,205 45	.....
New Toronto ...	4 " " " "	15,106 77	3 years ending Oct. 31, 1920	
Niagara Falls ..	4 " " " "	1,602 28	4 " " " "	
Niagara-on-the- Lake	2 " " " "	206 35	2 " " " "	
Norwich	4 " " " "	2,151 19	1 " " " "	
Oil Springs	3 " " " "	1,292 86	3 " " " "	
Otterville	4 " " " "	472 86	4 " " " "	
Palmerston	4 " " " "	2,177 40	4 " " " "	
Paris	4 " " " "	2,625 59	3 " " " "	
Parkhill	1 " " " "	278 18	1 " " " "	
Petersburg and St. Agatha Dis..	5 " " " "	956 66	1 " " " "	
Petrolia	4 " " " "	6,032 54	4 " " " "	
Plattsville	4 " " " "	1,834 99	3 " " " "	
Port Credit	4 " " " "	431 87	1 " " " "	
Port Stanley ...	4 " " " "	2,562 92	1 " " " "	
Preston	4 " " " "	6,180 62	.....
Princeton	4 " " " "	650 87	3 years ending Oct. 31, 1920	
Ridgetown	4 " " " "	2,815 72	4 " " " "	
Rockwood	4 " " " "	829 49	2 " " " "	
Rodney	4 " " " "	1,106 98	4 " " " "	
St. George	4 " " " "	1,033 52	4 " " " "	
St. Jacobs	4 " " " "	683 76	4 " " " "	
St. Mary's	4 " " " "	5,041 73	.....

SYSTEM—Continued

Sinking Fund Requirements, Payment of which have been Deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to 31 October, 1920

the Payment Deferred	Sinking Fund Requirements (Paid or Charged) as Part of the Cost of Power		Interest at 4 % per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October, 1920
	(b) Amount	(a) For Period of		
\$ c.			\$ c.	\$ c.
3,321 48	.....	.....	.....	.....
2,285 46	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	.....	2,248 22	132 27
1,306 99	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	.....	5,857 72	348 00
.....	4 " " " 1920.....	.....	23,969 69	1,335 38
600 09	.....	.....	.....	.....
4,446 72	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	.....	48,771 06	2,863 73
7,821 74	1 " " " 1917.....	.....	2,546 90	.....
1,829 90	.....	.....	.....	.....
1,790 18	.....	.....	.....	.....
205 61	.....	.....	.....	.....
2,390 20	2 years ending Oct. 31, 1918.....	.....	1,857 87	37 76
2,955 33	.....	.....	.....	.....
386 35	3 years ending Oct. 31, 1919.....	.....	863 22	34 63
.....	4 " " " 1920.....	.....	2,090 85	127 08
695 75	.....	.....	.....	.....
857 59	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	.....	2,205 45	130 84
13,929 02	1 " " " 1917.....	.....	1,177 75	.....
1,602 28	.....	.....	.....	.....
206 35	.....	.....	.....	.....
563 44	3 years ending Oct. 31, 1919.....	.....	1,587 75	68 74
1,292 86	.....	.....	.....	.....
472 86	.....	.....	.....	.....
2,177 40	.....	.....	.....	.....
2,201 45	1 year ending Oct. 31, 1917.....	.....	424 14	.....
278 18	.....	.....	.....	.....
246 19	4 years ending Oct. 31, 1919.....	.....	710 47	50 69
6,032 54	.....	.....	.....	.....
1,373 14	1 year ending Oct. 31, 1917.....	.....	461 85	.....
138 02	3 " " " 1919.....	.....	293 85	11 81
677 74	3 " " " 1919.....	.....	1,885 18	77 15
.....	4 " " " 1920.....	.....	6,180 62	333 80
463 91	1 " " " 1917.....	.....	186 96	.....
2,815 72	.....	.....	.....	.....
443 89	2 years ending Oct. 31, 1918.....	.....	385 60	6 74
1,106 98	.....	.....	.....	.....
1,033 52	.....	.....	.....	.....
683 76	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	.....	5,041 73	282 78
.....	.....	.....	.....	5,324 51

NIAGARA

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.—
Section 23 of the Act.—Sinking Fund Payments made by Certain Municipalities which
including Interest Allowed thereon

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act		Sinking Fund Requirements, of which has been
	(a) For Period of	(b) Amount	(a) For Period of
		\$ c.	
St. Thomas	4 years ending Oct. 31, 1920	15,014 99	.....
Sarnia	4 " " " "	27,871 00	4 years ending Oct. 31, 1920
Scarboro Twp....	1 " " " "	178 28	1 " " " "
Seaforth	4 " " " "	6,028 57	.....
Simcoe	4 " " " "	1,335 36	4 years ending Oct. 31, 1920
Springfield	4 " " " "	631 43	4 " " " "
Stamford Twp. .	4 " " " "	478 03	4 " " " "
Stratford	4 " " " "	12,727 71	.....
Strathroy	4 " " " "	5,074 80	3 years ending Oct. 31, 1920
Streetsville.....	1 " " " "	588 05	.....
Tavistock	4 " " " "	2,996 78	4 years ending Oct. 31, 1920
Thamesford	4 " " " "	1,355 98	3 " " " "
Thamesville	4 " " " "	1,233 82	4 " " " "
Thorndale	4 " " " "	1,692 32	3 " " " "
Tilbury	4 " " " "	1,903 97	4 " " " "
Tillsonburg	4 " " " "	5,569 10	.....
Toronto	4 " " " "	178,063 50	.....
Toronto Twp. ...	4 " " " "	962 96	2 years ending Oct. 31, 1920
Walkerville	4 " " " "	43,365 67	3 " " " "
Wallaceburg	4 " " " "	8,677 11	4 " " " "
Waterdown	4 " " " "	1,005 62	.....
Waterford	4 " " " "	1,313 00	4 years ending Oct. 31, 1920
Waterloo	4 " " " "	5,196 73	.....
Watford	4 " " " "	2,342 38	4 years ending Oct. 31, 1920
Welland	4 " " " "	8,141 81	4 " " " "
Wellesley	4 " " " "	1,961 49	4 " " " "
West Lorne	4 " " " "	833 35	4 " " " "
Weston	4 " " " "	4,930 50	.....
Windsor	4 " " " "	37,319 96	3 years ending Oct. 31, 1920
Woodbridge	4 " " " "	1,474 93	3 " " " "
Woodstock	4 " " " "	6,231 42	.....
Wyoming	4 " " " "	1,019 77	4 years ending Oct. 31, 1920
Zurich	4 " " " "	1,786 15	4 " " " "
Totals			
Municipalities		742,427 65	.....
Essex System..	2 " " " "	4,741 56	1 year ending Oct. 31, 1919
Companies		204,465 41	.....
Grand Totals		951,634 62	.....

SYSTEM—Continued

Sinking Fund Requirements, Payment of which has been deferred by the Commission under have been Operating more than Five Years and the Total of such Sinking Fund Payments to October 31, 1920

the Payment Deferred	Sinking Fund Requirements Paid (or Charged) as Part of the Cost of Power		Interest at 4 % per annum allowed on Sinking Fund Requirements which have been Paid	Total Sinking Fund Pay- ments and Accumulated Interest to the credit of the Municipality on 31st October 1920
(b) Amount	(a) For Period of	(b) Amount		
\$ c.		\$ c.	\$ c.	\$ c.
.....	4 years ending Oct. 31, 1920.....	15,014 99	905 01	15,920 00
27,871 00	.....	.....	.....	.....
178 28	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	6,028 57	410 38	6,438 95
1,335 36	.....	.....	.....	.....
631 43	.....	.....	.....	.....
478 03	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	12,727 71	775 83	13,503 54
3,885 20	1 " " " 1917.....	1,189 60	.....	1,189 60
.....	1 " " " 1920.....	588 05	.....	588 05
2,996 78	.....	.....	.....	.....
1,097 17	1 year ending Oct. 31, 1917.....	258 81	.....	258 81
1,233 82	.....	.....	.....	.....
1,174 48	1 year ending Oct. 31, 1917.....	517 84	.....	517 84
1,903 97	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	5,569 10	308 10	5,877 20
.....	4 " " " 1920.....	178,063 50	10,180 03	188,243 53
581 18	2 " " " 1918.....	381 78	6 51	388 29
29,578 48	1 " " " 1917.....	13,787 19	.....	13,787 19
8,677 11	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	1,005 62	58 13	1,063 75
1,313 00	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	5,196 73	301 21	5,497 94
2,342 38	.....	.....	.....	.....
8,141 81	.....	.....	.....	.....
1,961 49	.....	.....	.....	.....
833 35	.....	.....	.....	.....
.....	4 years ending Oct. 31, 1920.....	4,930 50	274 59	5,205 09
26,834 82	1 " " " 1917.....	10,485 14	.....	10,485 14
1,172 61	1 " " " 1917.....	302 32	.....	302 32
.....	4 " " " 1920.....	6,231 42	366 28	6,597 70
1,019 77	.....	.....	.....	.....
1,786 15	.....	.....	.....	.....
280,979 34	.....	461,448 31	23,994 69	485,443 00
1,821 08	1 year ending Oct. 31, 1920.....	2,920 48	.....	2,920 48
.....	.....	204,465 41	23,083 47	227,548 88
282,800 42	.....	668,834 20	47,078 16	715,912 36

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Acton	Jan., 1913	2,437 39	.....
Ailsa Craig	Jan., 1916	1,219 01	.....
Aylmer	Mar., 1918	.....	583 68
Ayr	Jan., 1915	.....	1,991 28
Baden	May, 1912	2,268 75	.....
Beachville	Aug., 1912	4,966 45	.....
Blenheim	Nov., 1915	.....	3,230 25
Bolton	Feb., 1915	.....	4,785 94
Bothwell	Sept., 1915	.....	3,987 14
Brampton	Nov., 1911	16,921 43	.....
Brantford	Feb., 1914	8,925 96	.....
Brigden	Jan., 1918	.....	1,382 91
Burford	June, 1915	.....	3,162 87
Burgessville	Nov., 1916	721 12	.....
Caledonia	Oct., 1912	300 04	.....
Chatham	Feb., 1915	1,670 51	.....
Clinton	Mar., 1914	.....	1,096 00
Comber	May, 1915	.....	4,466 34
Chippawa	Sept., 1919	.....	93 42
Dashwood	Sept., 1917	247 07	.....
Delaware	May, 1915	.....	436 33
Dereham Twp.	Sept., 1919	.....	224 84
Dorchester	Dec., 1914	652 49	.....
Drayton	Mar., 1918	.....	510 46
Dresden	April, 1915	.....	636 33
Drumbo	Dec., 1914	.....	953 79
Dublin	Oct., 1917	.....	395 88
Dundas	Jan., 1911	.....	1,055 87
Dunnville	June, 1918	.....	6,788 99
Dutton	Sept., 1915	.....	74 66
Elmira	Nov., 1913	355 80	.....
Elora	Nov., 1914	.....	1,055 42
Embro	Jan., 1915	.....	3,815 80
Etobicoke Twp.	Aug., 1917	2,083 36	.....
Exeter	June, 1916	.....	2,903 84
Fergus	Nov., 1914	.....	1,633 80
Forest	Mar., 1917	.....	361 01
Galt	May, 1911	28,200 74	.....
Glencoe	Aug., 1920	.....	.....
Georgetown	Sept., 1913	1,929 61	.....
Goderich	Feb., 1914	.....	10,336 47
Granton	July, 1916	.....	347 69
Guelph	Dec., 1910	26,066 37	.....
Hagersville	Sept., 1913	.....	1,360 50
Hamilton	Feb., 1911	619 02	.....

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
		97 50		574 25		3,109 14	
		48 76		1,265 10		2,532 87	
583 68					1,017 18		1,017 18
723 21			68 38	203 56			1,132 89
		90 75		285 76		2,645 26	
		198 66			642 09	4,523 02	
1,024 00			96 03	317 98			1,984 30
			191 44	1,306 55			3,670 83
1,567 02			140 07	1,067 32			1,492 87
		676 86		71 88		17,670 17	
		357 04			4,971 49	4,311 51	
			55 32	432 80			1,005 43
			126 51	100 96			3,188 42
		28 85			16 30	733 67	
		12 00		99 95		411 99	
		66 82		8,973 45		10,710 78	
1,117 92			21 92		376 92		376 92
			178 65	707 31			3,937 68
			3 74	787 92		690 76	
		9 88		161 39		418 34	
			17 45	192 95			260 83
			8 99		81 78		315 61
		26 10		186 61		865 20	
510 46					129 89		129 89
			25 45	1,394 28		732 50	
100 00			37 08	231 75	31 34		659 12
			15 83		32 34		443 05
			42 23		2,593 63		3,691 73
2,062 26			271 56		1,934 32		6,932 61
74 66				477 82		477 82	
		14 23		931 21		1,301 24	
1,068 96			13 54	972 71		972 71	
763 15			138 09		14 60		3,205 34
		83 33		1,717 84		3,884 53	
2,977 15			73 31	382 42		382 42	
			65 35	44 05			1,655 10
			14 44	1,000 68		625 23	
		1,128 03			1,776 05	27,552 72	
				200 32		200 32	
		77 18		1,525 20		3,531 99	
5,335 97			286 69		3,180 09		8,467 28
			13 91	222 37			139 23
		1,042 65			2,674 69	24,434 33	
1,020 00			35 95	893 96		517 51	
		24 76			25,056 63		24,412 85

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Harriston	July 1916	.....	4,426 38
Hensall	Jan 1917	.....	1,589 06
Hespeler	Feb., 1911	5,319 54	.....
Highgate	Dec., 1916	.....	594 88
Ingersoll	May, 1911	12,252 82	.....
Kitchener	Jan., 1911	27,942 60	.....
Lambeth	April, 1915	.....	873 90
Listowel	June, 1916	778 15	.....
London	Jan., 1911	106,334 71	.....
London and Port Stanley Railway	Aug., 1914	.....	23,325 11
Lucan	Feb., 1915	2,601 88	.....
Lynden	Feb., 1915	.....	3,205 52
Milton	April, 1913	.....	662 97
Milverton	June, 1916	977 27	.....
Mimico	May, 1912	3,286 33	.....
Mitchell	Sept., 1911	1,708 89	.....
Moorefield	Mar., 1918	.....	205 17
Mount Brydges	Mar., 1915	.....	416 78
Markham	Apr., 1920	.....	.....
Niagara-on-the-Lake	Aug., 1919	47 72	.....
Niagara Falls	Dec., 1915	7,276 83	.....
New Hamburg	Mar., 1911	.....	2,255 16
New Toronto	Feb., 1914	29,644 64	.....
Norwich	May 1912	2,003 65	.....
Oil Springs	Feb., 1918	.....	514 79
Otterville	Feb., 1916	122 81	.....
Palmerston	July 1916	.....	1,847 78
Paris	Feb., 1914	3,303 56	.....
Parkhill	May 1920	.....	.....
Petrolia	May 1916	.....	2,707 59
Plattsville	Dec., 1914	.....	4,330 51
Port Credit	Aug., 1912	1,753 99	.....
Port Stanley	Apr. 1912	.....	491 60
Preston	Jan., 1911	15,913 87	.....
Princeton	Jan., 1915	.....	1,528 63
Ridgetown	Dec., 1915	505 69	.....
Rockwood	Sep., 1913	.....	1,543 92
Rodney	Feb., 1917	296 19	.....
St. George	Sep., 1915	58 44	.....
St. Jacobs	Sep., 1917	154 71	.....
St. Mary's	May 1911	1,688 37	.....
St. Thomas	Apr., 1911	24,718 14	.....
Sarnia	Dec., 1916	6,317 28	.....
Seaforth	Nov. 1911	7,956 19	.....
Scarboro Township	Aug., 1918	.....	.....

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	177 06	1,154 75	.....	.....	3,448 69
1,149 06	41 65	.....	17 11	.....	498 76
.....	212 78	.....	.....	554 57	4,977 75	.....
594 88	27 76	.....	27 76
.....	490 11	.....	.....	1,025 78	11,717 15	.....
.....	1,117 70	.....	.....	4,024 00	25,036 30	.....
.....	34 96	443 33	.....	.....	465 53
.....	787 27	20 08	.....	1,212 42	.....	1,223 38	.....
.....	4,253 39	.....	.....	10,497 53	100,090 57	.....
24,013 33	688 22	.....	1,802 05	.....	1,802 05
.....	104 08	.....	1,776 87	.....	4,482 83	.....
1,126 80	124 35	714 45	.....	.....	1,488 62
.....	26 52	2,737 20	.....	2,047 71	.....
.....	39 09	.....	753 91	.....	1,770 27	.....
.....	131 45	.....	344 65	.....	3,762 43	.....
.....	68 36	.....	408 34	.....	2,185 59	.....
205 17	103 33	.....	103 33	.....
402 19	9 43	67 55	.....	43 53	.....
.....	191 47	.....	191 47	.....
.....	1 91	.....	388 63	.....	438 26	.....
.....	291 07	.....	.....	2,488 61	5,079 29	.....
1,089 23	71 23	254 38	.....	.....	982 78
.....	1,185 79	.....	.....	3,904 46	26,925 97	.....
.....	80 15	.....	784 65	.....	2,868 45	.....
.....	20 59	283 74	.....	.....	251 64
.....	4 91	.....	213 85	.....	341 57	.....
.....	73 91	1,262 37	.....	.....	659 32
.....	132 14	.....	.....	893 59	2,542 11	.....
.....	53 53	.....	53 53	.....
.....	108 30	2,685 44	.....	.....	130 45
2,000 00	137 03	1,050 69	.....	.....	1,416 85
.....	70 16	.....	.....	30 99	1,793 16	.....
457 55	11 13	1,364 06	.....	1,318 88	.....
.....	636 55	.....	.....	3,435 10	13,115 32	.....
750 00	57 08	.....	209 80	.....	1,045 51
.....	505 69	.....	.....	1,037 50	.....	1,037 50	.....
.....	61 76	155 48	.....	.....	1,450 20
.....	11 85	.....	1,035 03	.....	1,343 07	.....
.....	2 34	.....	122 66	.....	183 44	.....
.....	42 05	5 60	.....	102 04	.....	220 30	.....
.....	67 53	.....	.....	2,182 57	.....	426 67
.....	988 73	.....	81 55	.....	25,788 42	.....
177 37	255 84	.....	16,398 50	.....	23,148 99	.....
.....	318 25	.....	.....	114 60	8,159 84	.....
.....	673 11	.....	673 11

NIAGARA

Statement showing the Net Credit or Charge to each Municipality in respect of Power
ments Made and Interest Added during the Year; also the Amount Credited
Ending 31st October, 1920, and the Accumulated Amount standing

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919	
		Credit	Charge
		\$ c.	\$ c.
Simcoe	Apr., 1915	3,479 07	.....
Springfield	Aug., 1917	337 96	.....
Stamford Township	Nov., 1916	3,555 12	.....
Stratford	Jan., 1911	25,401 19	.....
Strathroy	Dec., 1914	8,664 40	.....
Streetsville .....	.....	.....	.....
Tavistock	Nov., 1916	3,666 36	.....
Thamesford	Feb., 1914	.....	1,496 05
Thamesville	Oct., 1915	.....	2,025 13
Thorndale	Mar., 1914	.....	1,288 82
Tilbury	Apr., 1915	.....	5,258 98
Tillsonburg	Aug., 1911	3,129 01	.....
Toronto	June 1911	27,435 97	.....
Toronto Twp.	Aug., 1913	706 34	.....
Walkerville	Nov., 1914	6,146 63	.....
Wallaceburg	Feb., 1915	.....	2,159 69
Waterdown	Nov., 1911	.....	1,289 17
Waterford	Apr., 1915	2,662 20	.....
Waterloo	Dec., 1910	8,763 88	.....
Watford	Sep., 1917	.....	3,867 35
Welland	Sep., 1917	9,448 82	.....
Wellesley	Nov., 1916	1,074 97	.....
West Lorne	Jan., 1917	381 82	.....
Weston	Aug., 1911	8,986 87	.....
Windsor	Oct., 1914	.....	11,127 54
Woodbridge	Dec., 1914	244 68	.....
Woodstock	Jan., 1911	19,020 65	.....
Wyoming	Nov., 1916	.....	2,107 67
Zurich	Sep., 1917	1,293 03	.....
Breslau District	Dec., 1913	.....	2,425 27
Petersburg and St. Agatha District	Sep., 1913	.....	510 91
H. E. P. C. Service Building .....	.....	.....	.....
		496,948 36	141,747 84

SYSTEM

Supplied to it to 31st October, 1919—the Cash Received and Applied thereon, Adjust-
or Charged to each Municipality in respect of Power Supplied in the Year
as a Credit or Charge to each Municipality at 31st October, 1920

Cash Receipts and Payments on account of such Credits and Charges, also Adjust- ments made during the Year		Interest at 4% per annum added during the Year		Amount Credited or Charged in respect of Power Supplied in the Year Ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
Credited	Charged	Credited	Charged	Credited	Charged	Credit	Charge
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	139 16	.....	865 34	.....	4,483 57	.....
.....	13 52	.....	79 31	.....	430 79	.....
.....	142 20	.....	.....	343 89	3,353 43	.....
.....	1,016 05	.....	.....	2,575 43	23,841 81	.....
.....	346 58	.....	1,099 20	.....	10,110 18	.....
.....	2,626 88	.....	2,626 88	.....
.....	146 65	.....	646 78	.....	4,459 79	.....
750 00	46 44	983 98	.....	191 49	.....
75 77	80 15	746 24	.....	.....	1,283 27
.....	51 55	386 63	.....	.....	953 74
619 55	199 18	950 38	.....	.....	3,888 23
.....	125 16	.....	146 63	.....	3,400 80	.....
.....	1,097 44	.....	.....	138,271 55	.....	109,738 14
.....	28 25	.....	249 81	.....	984 40	.....
.....	245 86	.....	13,386 46	.....	19,778 95	.....
.....	86 39	6,505 02	.....	4,258 94	.....
1,289 17	549 62	.....	549 62
.....	106 49	.....	657 61	.....	3,426 30	.....
.....	350 56	.....	.....	235 80	8,878 64	.....
1,022 90	136 97	.....	200 24	.....	3,181 66
.....	282 59	385 80	.....	.....	2,645 49	6,906 54	.....
.....	43 00	.....	242 87	.....	1,360 84	.....
.....	15 27	.....	1,159 48	.....	1,556 57	.....
.....	122 48	359 47	.....	892 85	.....	10,116 71	.....
.....	445 10	15,444 87	.....	3,872 23	.....
.....	9 79	.....	.....	71 16	183 31	.....
.....	760 83	.....	.....	1,387 87	18,393 61	.....
.....	84 31	276 81	.....	.....	1,915 17
.....	51 72	.....	317 75	.....	1,662 50	.....
.....	97 01	.....	907 02	.....	3,429 30
.....	20 44	.....	691 93	.....	1,223 28
.....
54,651 41	1,740 08	19,857 06	4,832 69	111,577 62	224,258 63	519,504 72	209,049 51

NIAGARA RURAL LINES.

Statement showing "Cost of Power," "Operating Expenses," "Fixed Charges,"
and "Revenue," and the Net "Surplus" or "Deficit" on each Line for the
year ending October 31, 1920.

NIAGARA

Statement showing "Cost of Power," "Operating Expenses," "Fixed Charges" the year ending

Lines Operated by	Capital Cost	Cost of Power to Commission	Operation, Main- ten- ance and Adminis- tration Expenses	Interest
	\$ c.	\$ c.	\$ c.	\$ c.
Ancaster Township	5,159 03	.....	.....	257 96
Bolton	2,110 45	.....	.....	105 52
Bothwell	6,571 84	.....	.....	355 88
Brampton	588 87	.....	.....	29 44
Chatham	898 18	.....	.....	44 90
Dereham Township	29,243 50	.....	.....	1,483 42
Elora	777 82	.....	.....	38 90
Etobicoke	54,608 68	.....	.....	2,984 10
Georgetown	8,889 59	.....	.....	444 48
Goderich	2,313 36	.....	.....	115 66
Lucan	333 26	.....	.....	16 66
Milton	813 82	.....	.....	40 70
Norwich	32,978 23	.....	.....	1,673 26
Preston	9,155 08	.....	.....	457 76
St. Thomas	1,933 82	.....	.....	96 20
Scarboro Township	26,125 24	469 40	186 60	1,928 29
Springfield	4,561 39	.....	.....	234 93
Stratford	4,058 47	.....	.....	202 92
Toronto	41,167 92	.....	.....	2,058 40
Toronto Township	43,309 37	.....	.....	2,165 46
Vaughan Township	21,592 88	.....	.....	1,209 96
Walkerville	41,148 83	.....	.....	1,981 30
Waterdown	11,825 24	.....	.....	591 26
Waterford	3,399 87	.....	.....	181 82
Waterloo	5,062 60	.....	.....	230 60
Weston	5,234 46	.....	.....	209 38
Windsor	8,767 56	.....	.....	422 58
Woodstock	1,088 20	.....	.....	54 42
Welland	30,136 86	4,368 59	.....	1,506 83
St. Catharines	7,500 00	50,327 28	107 44	300 00
Grantham Township	28,289 47	482 24	17 51	1,429 13
Louth Township	2,771 19	.....	.....	138 56
Port Colborne.....	.....	3,157 37	121 87	.....
Lines Operated by the Hydro-Electric Power Commission of Ontario:				
Don Mills Road	9,861 42	374 87	387 00	395 36
Brady & Raymond	817 18	.....	1 60	32 67
Wm. Pullen	74 15	.....	.....	2 96
Innes, Karn & Longworth	2,875 20	.....	50 26	115 01
W. G. Bailey	599 21	.....	.....	23 97
Port Dalhousie	5,834 33	2,068 07	147 32	233 37
Non-operating Capital	13,189 39	.....	.....	.....
Totals	475,665 96	61,247 82	1,019 60	23,794 02

RURAL LINES

and "Revenue," and the Net "Surplus" or "Deficit" on each Line for
October 31, 1920

Fixed Charges		Total Cost of Power, Operat- ing Expenses, Fixed Charges and Interest	Revenue from Muni- cipalities	Net Surplus or Deficit for Year	
Renewals	Sinking Fund			Surplus	Deficit
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	92 86	350 82	350 82	.....	.....
.....	37 98	143 50	143 50	.....	.....
.....	547 44	903 32	903 32	.....	.....
.....	10 60	40 04	40 04	.....	.....
.....	16 16	61 06	61 06	.....	.....
.....	526 36	2,009 78	2,009 78	.....	.....
.....	14 00	52 90	52 90	.....	.....
.....	982 96	3,967 06	3,967 06	.....	.....
.....	160 00	604 48	604 48	.....	.....
.....	41 64	157 30	157 30	.....	.....
.....	6 00	22 66	22 66	.....	.....
.....	14 64	55 34	55 34	.....	.....
.....	602 38	2,275 64	2,275 64	.....	.....
.....	164 80	622 56	622 56	.....	.....
.....	34 64	130 84	130 84	.....	.....
8 42	592 57	3,185 28	3,194 81	9 53	.....
.....	105 49	340 42	340 42	.....	.....
.....	73 04	275 96	275 96	.....	.....
.....	741 02	2,799 42	2,799 42	.....	.....
.....	779 56	2,945 02	2,945 02	.....	.....
.....	388 68	1,598 64	1,598 64	.....	.....
.....	723 09	2,704 39	2,704 39	.....	.....
.....	212 86	804 12	804 12	.....	.....
.....	65 46	247 28	247 28	.....	.....
.....	91 14	321 74	321 74	.....	.....
.....	94 22	303 60	303 60	.....	.....
.....	152 12	574 70	574 70	.....	.....
.....	19 58	74 00	74 00	.....	.....
.....	542 46	6,417 88	6,445 25	27 37	.....
.....	135 00	50,869 72	50,896 57	26 85	.....
.....	514 50	2,443 38	2,449 92	6 54	.....
.....	49 88	188 44	188 44	.....	.....
.....	.....	3,279 24	3,400 25	121 01	.....
.....	.....	.....	.....	191 30	.....
395 36	177 51	1,730 10	972 67	.....	757 43
32 67	14 71	81 65	113 40	31 75	.....
2 96	1 33	7 25	96 00	88 75	.....
115 01	51 75	332 03	411 80	79 77	.....
23 97	10 79	58 73	120 78	62 05	.....
233 37	105 02	2,787 15	2,807 31	20 16	.....
.....
811 76	8,894 24	95,767 44	95,483 79	473 78	757 43

Surpluses placed to credit of Municipalities \$191 30
Net deficit on lines operated by the Commission 474 95

NIAGARA RURAL LINES

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919	\$4,946 78	
Deduct expenditures to 31st October, 1919	673 10	
		\$4,273 68
Amounts added during year ending 31st October, 1920:		
Amounts charged Municipalities on lines operated by the		
Commission as part of the cost of power delivered		
to them	811 76	
Interest at 4% per annum on the monthly balances to		
the credit of the account	170 95	
		982 71
Expenditures during the year ending 31st October, 1920		\$5,256 39
		6 60
Balance carried forward 31st October, 1920		\$5,249 79

NIAGARA RURAL LINES.

Statement showing the Total Sinking Fund Requirements on each Line—all of which have been paid—and the Total of such Sinking Fund Payments, with interest allowed thereon, to October 31, 1920.

NIAGARA

Statement showing the Total Sinking Fund Requirements on each line—
with interest allowed thereon

Lines operated by	Sinking Fund Requirements	
	Period Covered	Amount
Ancaster Twp.	7 yrs. ending 31st Oct., 1920, inclusive	\$ c. 635 45
Baden	8 " " "	157 34
Bolton	6 " " "	161 93
Bothwell	5 " " "	1,755 05
Brampton	3 " " "	33 56
Chatham	5 " " "	77 74
Dereham Twp.	3 " " "	1,454 53
Elora	7 " " "	83 91
Etobicoke	5 " " "	2,857 72
Georgetown	7 " " "	944 99
Goderich	7 " " "	266 62
Grantham Twp.	6 " " "	2,695 18
London Abattoir ..	7 " " "	60 94
Louth Twp.	2 " " "	99 76
Lucan	1 " " "	6 00
Milton	7 " " "	88 56
Mimico	8 " " "	921 33
New Toronto	7 " " "	168 28
Norwich	8 " " "	3,175 97
Port Dalhousie ..	9 " " "	693 36
Preston	8 " " "	1,241 22
St. Catharines ..	7 " " "	888 75
St. Thomas	7 " " "	207 77
Scarboro Twp.	3 " " "	1,466 31
South Dorchester Twp.	4 " " "	100 06
Springfield	1 " " "	105 49
Stratford	8 " " "	504 73
Thamesford	6 " " "	6 32
Thorndale	7 " " "	5 57
Toronto	8 " " "	4,439 51
Toronto Twp.	8 " " "	4,488 22
Vaughan Twp.	6 " " "	1,063 87
Walkerville	6 " " "	3,366 23
Waterdown	7 " " "	1,298 94
Waterford	6 " " "	219 74
Waterloo	7 " " "	422 18
Welland	8 " " "	3,539 06
Weston	7 " " "	800 42
Windsor	5 " " "	646 52
Woodstock	8 " " "	124 62
<i>Lines Operated by the Commission.</i>		
Don Mills Road	7 " " "	1,012 98
Brady & Raymond	7 " " "	108 34
W. Pullen	7 " " "	8 37
Innes, Karn & Longworth	8 " " "	393 29
Bailey's Farm	7 " " "	64 71
		42,861 44

RURAL LINES

all of which have been paid—and the Total of such Sinking Fund Payments to 31st October, 1920

Sinking Fund Paid		Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund payments and accumulated interest to 31st October, 1920
Period Covered	Amount		
	\$ c.	\$ c.	\$ c.
Full period	635 45	92 03	727 48
"	157 34	37 36	194 70
"	161 93	12 72	174 65
"	1,755 05	83 55	1,838 60
"	33 56	1 87	35 43
"	77 74	6 20	83 94
"	1,454 53	55 43	1,509 96
"	83 91	8 84	92 75
"	2,857 72	113 23	2,970 95
"	944 99	102 40	1,047 39
"	266 62	30 01	296 63
"	2,695 18	247 46	2,942 64
"	60 94	10 35	71 29
"	99 76	4 32	104 08
"	6 00	.....	6 00
"	88 56	9 32	97 88
"	921 33	169 89	1,091 22
"	168 28	28 74	197 02
"	3,175 97	294 84	3,470 81
"	693 36	62 41	761 77
"	1,241 22	171 31	1,412 53
"	838 75	106 34	995 09
"	207 77	21 90	229 67
"	1,466 31	42 10	1,508 41
"	100 06	6 18	106 24
"	105 49	.....	105 49
"	504 73	63 88	568 61
"	6 32	1 21	7 53
"	5 57	90	6 47
"	4,439 51	475 34	4,914 85
"	4,488 22	480 49	4,968 71
"	1,063 87	38 30	1,102 17
"	3,366 23	279 33	3,645 56
"	1,298 94	142 83	1,441 77
"	219 74	10 86	230 60
"	422 18	35 75	457 93
"	3,539 06	380 38	3,919 44
"	800 42	98 35	898 77
"	646 52	42 25	688 77
"	124 62	14 40	139 02
"	1,012 98	94 99	1,107 97
"	108 34	12 03	120 37
"	8 37	84	9 21
"	393 29	44 41	437 70
"	64 71	6 33	71 04
.....	42,861 44	3,947 67	46,809 11

NIAGARA

Statement Showing the Surplus or Deficit on each Line at 31st October
Year ending 31st October, 1920, and the Net

Municipality	Date Commenced Operation	Surplus or Deficit at October 31, 1919	
		Surplus	Deficit
		\$ c.	\$ c.
Grantham Twp.....	May, 1915	.....	8 90
St. Catharines	Apr., 1914	.....	25 82
Scarboro Township.....	Aug., 1918	.....	9 17
Welland.....	Mar., 1913	27 08	.....
Port Colborne.....	Mar., 1920	.....	.....
Lines Operated by Commission:			
Don Mills Road.....	Nov., 1914	.....	3,474 58
Brady & Raymond.....	Oct., 1914	237 33	.....
Wm. Pullen	May, 1914	546 80	.....
Innes, Karn & Longworth.....	Feb., 1913	373 12	.....
W. G. Bailey	Oct., 1914	89 83	.....
Port Dalhousie ..	Nov., 1912	119 42	.....
		1,393 58	3,518 47

RURAL LINES

1919, and Interest added during the year ; also the Surplus or Deficit for the
Surplus or Deficit at 31st October, 1920

Interest on Surplus or Deficit at 4% per annum added during the year		Surplus or Deficit for the year ending 31st October, 1920		Net Surplus or Deficit on October 31, 1920	
Credited	Charged	Surplus	Deficit	Surplus	Deficit
\$.c	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	36	6 54	.....	.....	2 72
.....	1 03	26 85	.....	.....	.....
.....	36	9 53	.....	.....	.....
1 08	.....	27 37	.....	55 53	.....
.....	.....	121 01	.....	121 01	.....
				176 54	2 72
.....	138 98	.....	757 43	.....	4,370 99
9 49	.....	31 75	.....	278 57	.....
21 87	.....	88 75	.....	657 42	.....
14 92	.....	79 77	.....	467 81	.....
3 59	.....	62 05	.....	155 47	.....
4 78	.....	20 16	.....	144 36	.....
55 73	140 73	473 78	757 43	1,880 17	4,373 71

Balances owing to municipalities	\$176 54
“ “ by “	2 72
	\$173 82
Net deficit to 31st October, 1920, on lines operated by the Commission....	2,667 36

SEVERN SYSTEM.

Statement showing the Amount to be paid by each Municipality as the Cost under Section 23 of the Act—of Power supplied to it by the Commission—the Amount received by the Commission from each Municipality on account of such Cost—and the amount credited or charged to each Municipality upon ascertaining by annual adjustment the cost of Power supplied to it, in the year ending October 31, 1920.

SEVERN

Statement showing the Amount to be paid by each Municipality as the Cost under Section Commission from each Municipality on account of such Cost—and the amount the cost of Power supplied to it, in

Municipality	Interim Rates per Horse Power Col- lected by Commission during Year		Share of Capital Cost of System on which Interest and fixed Charges are Payable	Average Horse Power Supplied in Year after Correc- tion for Power Factor	Cost of Power Purchased from Eu- genia and Wasdell Systems	Share of Operating and Fixed		
	To Jan. 1/20	To Oct. 31/20				Operating, Mainten- ance and Adminis- trative Expenses	Interest	Renewals
	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.	\$ c.	\$ c.
Alliston.....	40 00	50 00	80,482 68	132.	298 03	2,642 17	3,614 02	2,181 66
Barrie.....	29 00	29 00	138,014 41	665.8	1,503 23	6,647 89	6,265 34	3,782 18
Beeton.....	45 00	85 00	64,702 44	88.3	199 36	1,948 33	2,944 34	1,777 40
Bradford.....	47 00	75 00	52,992 02	41.	92 57	1,364 19	2,411 45	1,455 70
Coldwater.....	40 00	50 00	16,373 35	56.8	128 24	677 56	745 36	449 95
Collingwood...	28 00	28 00	323,451 85	1,336.9	3,018 47	17,394 53	14,708 85	8,879 24
Cookstown	35 00	60 00	26,538 56	61.1	137 95	1,092 73	1,206 88	728 55
Creemore	60 00	65 00	23,313 03	46.1	104 08	1,084 66	1,058 46	638 96
Elmvale	31 00	37 00	29,582 69	141.2	318 80	1,491 07	1,340 10	808 97
Midland	20 00	28 00	208,910 07	1,112.5	2,511 79	8,013 76	9,498 41	5,733 87
Penetang.....	22 00	32 00	157,890 48	839.9	1,896 31	6,334 57	7,185 65	4,337 74
Port McNicoll.	35 00	85 00	9,071 10	33.9	76 54	867 38	412 93	249 27
Stayner.....	35 00	40 00	31,149 91	120.	270 93	1,685 84	1,409 92	851 10
Thornton.....	43 00	85 00	10,996 55	11.1	25 06	370 04	500 53	302 15
Tottenham.....	51 00	85 00	32,050 83	28.4	64 12	1,121 35	1,459 00	880 75
Victoria H'rbour	35 00	50 00	13,502 43	48.9	110 40	843 32	614 68	371 06
Waubauskene..	30 00	45 00	6,846 94	24.8	55 99	307 87	310 24	187 28
Totals—								
Municipalities	.....	.....	1,225,869 34	.....	10,811 87	53,887 24	55,686 16	33,615 83
Companies...	.....	.....	155,361 80	.....	2,041 04	6,052 41	7,068 84	4,267 22
Non-Operating Capital.....	.....	.....	43 30	.....	.....	.....	.....	.....
Grand Total	.....	.....	1,381,274 44	.....	12,852 91	59,939 65	62,755 00	37,883 05

SYSTEM

23 of the Act—of Power supplied to it by the Commission—the Amount received by the credited or charged to each Municipality upon ascertaining by annual adjustment the year ending 31st October, 1920.

Costs Charges	Sinking Fund	Total Cost of Power for year as Provided to be Paid under Sec- tion 23 of Act	Amount Paid by Municipal- ities to Commis- sion in res- pect of Power Supplied in Year	Profit from Sale of Power to Com- panies Credited to Munic- ipalities in propor- tion to their Mainte- nance costs	Total Revenue from each Municip- ality	Amount Credited or Charged to each Municipality upon ascertaining the Cost of Power by Annual Adjustment		Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
						Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
33 00	.....	8,768 88	6,508 68	195 50	6,704 18	.....	2,064 70	.....
166 45	1,377 66	19,742 75	19,309 40	409 92	19,719 32	.....	23 43	1917-18
22 07	.....	6,891 50	6,542 11	150 30	6,692 41	.....	199 09	.....
10 25	.....	5,334 16	2,883 72	110 00	2,993 72	.....	2,340 44	.....
14 20	204 36	2,219 67	2,544 75	30 52	2,575 27	355 60	.....	1917-18
334 22	4,978 30	49,313 61	37,433 18	812 85	38,246 03	.....	11,067 58	1917-18
15 27	.....	3,181 38	3,239 87	75 54	3,315 41	134 03	.....	.....
11 52	394 12	3,291 80	2,789 49	76 75	2,866 24	.....	425 56	1916-17
35 30	354 55	4,348 79	4,823 78	60 05	4,883 83	535 04	.....	1917-18
278 12	2,842 84	28,878 79	29,660 39	367 57	30,027 96	1,149 17	.....	1917-18
209 97	2,839 24	22,803 48	25,127 99	319 20	25,447 19	2,643 71	.....	1919-20
8 47	100 61	1,715 20	2,558 66	44 33	2,602 99	887 79	.....	1916-17
30 00	320 81	4,568 60	4,628 99	90 78	4,719 77	151 17	.....	1917-18
2 77	.....	1,200 55	867 27	25 04	892 31	.....	308 24	.....
7 10	.....	3,532 30	2,254 16	69 89	2,324 05	.....	1,208 25	.....
12 22	152 22	2,103 90	2,313 58	46 03	2,359 61	255 71	.....	1916-17
6 20	81 41	948 99	1,052 61	12 77	1,065 38	116 39	.....	1916-17
1,197 13	13,646 12	168,844 35	154,538 63	2,897 04	157,435 67	6,228 61	17,637 29	.....
226 00	2,793 09	22,448 60	25,345 64	.....	.....	.....	.....	.....
.....
1,423 13	16,439 21	191,292 95	179,884 27	2,897 04	157,435 67	6,228 61	17,637 29	.....

SEVERN SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balances brought forward 31st October, 1919	\$5,110 68
Added during the year ending 31st October, 1920:	
Amount charged to Municipalities as part of the cost of power delivered to them	\$1,197 13
Provision against equipment employed in respect of con- tracts with sundry companies	226 00
Interest at 4% per annum on monthly balances to the credit of the account	204 43
	<u>1,627 56</u>
Expenditures during the year ending 31st October, 1920	\$6,738 24
	<u>1,063 30</u>
Balance carried forward 31st October, 1920	\$5,674 94

SEVERN SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919	\$146,154 18
Deduct expenditures to 31st October, 1919.....	<u>4,402 37</u>
Balance brought forward 31st October, 1919	141,751 81
Added during the year ending 31st October, 1920:	
Amounts charged to Municipalities as part of the cost of power delivered to them	\$33,615 83
Provision against equipment employed in respect of con- tracts with sundry companies	4,267 22
Interest at 4% per annum on monthly balances to the credit of the account	5,670 07
Renewals reserve provided on second-hand equipment purchased	139 50
	<u>43,692 62</u>
Expenditures during the year ending 31st October, 1920	\$185,444 43
	<u>147 41</u>
	\$185,297 02

SEVERN SYSTEM

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality Sinking Fund Requirements payment of which has been deferred by the Commission under Section 23 of the Act— Sinking Fund Payments made by certain Municipalities which have been operating more than five years—and the Total of the Sinking Fund Payments including interest allowed thereon to October 31, 1920

Municipality	Total Sinking Fund Requirements chargeable to the Municipality under the Act		Sinking Fund Requirements the Payment of which has been Deferred		Sinking Fund Requirements Paid (or Charged) as part of the Cost of Power		Interest at 4% per annum allowed on Sinking Fund requirements which have been paid		Total Sinking Fund Payments and accumulated interest to the credit of the Municipality on 31 October, 1920	
	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	\$	c.	\$	c.
Alliston	3 years ending 31st Oct., 1920	\$ 3,063 75	3 yrs. ending 31st Oct., 1920	\$ 3,063 75	2 yrs. end. 31 Oct., '20	2,685 44	52	31	2,737 75	
Barrie	4 "	7,060 77	" "	4,375 33	" "	" "	" "	" "	" "	" "
Beeton	3 "	2,736 38	" "	2,736 38	" "	" "	" "	" "	" "	" "
Bradford	3 "	1,905 38	" "	1,905 38	" "	" "	" "	" "	" "	" "
Coldwater	4 "	965 55	" "	548 78	2 yrs. end. 31 Oct., '20	416 77	8	50	425 27	
Collingwood	4 "	20,242 40	" "	11,388 07	2 "	8,854 33	155	04	9,009 37	
Cookstown	3 "	1,144 79	" "	1,144 79	" "	" "	" "	" "	" "	" "
Creemore	4 "	1,570 25	" "	1,176 13	1 yr. e.d. 31 Oct., '20	394 12	" "	" "	394 12	
Elmvale	4 "	1,527 91	" "	948 66	2 "	579 25	8	99	588 24	
Midland	4 "	12,431 22	" "	7,729 75	2 "	4,701 47	74	34	4,775 81	
Penetang	4 "	7,372 57	" "	" "	4 "	7,372 57	335	03	7,707 60	
Port McNicoll	4 "	497 04	" "	396 43	1 "	100 61	" "	" "	100 61	
Stayner	4 "	1,591 35	" "	1,046 02	2 "	545 33	8	98	554 31	
Thornton	2 "	367 58	" "	367 58	" "	" "	" "	" "	" "	
Tottenham	3 "	1,251 08	" "	1,251 08	" "	" "	" "	" "	" "	
Victoria Harbour	4 "	747 32	" "	595 10	1 yr. e.d. 31 Oct., '20	152 22	" "	" "	152 22	
Waubashene	4 "	384 87	" "	303 46	1 "	81 41	" "	" "	81 41	
Totals—Municipalities		64,860 21		38,976 69		25,883 52	643	19	26,526 71	
Totals—Companies (from commencement of operations)		11,959 94	(Nil.)	"	From commencement of operations	11,959 94	854	87	12,814 81	
Grand Totals		76,820 15		38,976 69		37,843 46	1,498	06	39,341 52	

SEVERN SYSTEM

Statement showing the net Credit or Charge to each Municipality in respect of power supplied to it to 31st October, 1919—the cash received and applied thereon, interest added during the year, also the amount Credited or Charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a Credit or Charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Cash receipts and pay- ments on account of such charges made during the year		Interest at 4% per annum added during the year		Amount Credited or Charg- ed in respect of power supplied in the year end- ing 31st October, 1920		Accumulated amount standing at the credit or Charge on 31st Oct., 1920	
		Credit	Charge			Credited	Charged	Credited	Charged	Credit	Charge
Alliston	June, 1918.....	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Barrie	Apr., 1913.....	11,391 55	4,278 27	44 92	455 66	170 41	2,064 70	11,823 78	23 43	6,468 46	
Beeton	Aug., 1918.....		3,967 16			158 69	199 09		199 09	4,324 94	
Bradford	Oct., 1918.....		3,736 10			149 44	2,340 44		2,340 44	6,225 98	
Coldwater	Mar., 1913.....		2,887 24			115 49				2,647 13	
Collingwood	Mar., 1913.....	16,028 72			641 15		11,067 58	5,602 29			
Cookstown	May, 1918.....		1,667 11			66 68				1,599 76	
Creemore	Nov., 1914.....	2,398 60			95 94		425 56	2,068 98			
Elmvale	June, 1913.....	132 05			5 28			672 37			
Midland	July, 1911.....		14,099 56			562 55				13,350 66	
Penetang	July, 1911.....	510 85		162 28							
Port McNicoll	Jan., 1915.....		2,237 02		20 43			3,174 99			
Stayner	Oct., 1913.....	9 19			37	89 48				1,438 71	
Thornton	Nov., 1918.....		885 70			35 43		160 73			
Tottenham	Oct., 1918.....		2,110 41			84 42	308 24		308 24	1,229 37	
Victoria Harbor	July 1914.....	195 25					1,208 25		1,208 25	3,403 08	
Waubashene	Dec., 1914.....		136 56		7 81			458 77		25 63	
Totals		30,666 21	36,005 13	207 20	1,226 64	1,438 05	17,637 29	23,961 91	40,713 72		

WASDELL'S SYSTEM

Operating Account for Year Ending 31st October, 1920

<i>Costs of operation as provided for under Sections 6 C and 23 of the Act.</i>		<i>Revenue for Period.</i>	
Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative Expenses chargeable to the operation of this System	\$14,732 52	Collected from Municipalities	\$20,563 06
Interest on Capital Investment	13,526 10	Power sold to Private Companies and to Severn System	17,513 95
Provision for renewal of Generating Plant, Lines, Stations, etc.	5,938 36	Add amounts due by certain Municipalities, being the difference between the sums paid and the Costs of Power supplied to them in the period	\$1,303 65
Provision for Contingencies	253 24	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	216 62
Provision for Sinking Fund:			1,087 03
By charges against Municipalities	\$2,656 27	Revenue	\$39,164 04
By charges against contracts with Private Companies which purchased power	2,640 25	Loss on Sale of Power to Private Companies (written off against Contingency Reserve)	582 70
	5,296 52		\$39,746 74
	\$39,746 74		

WASDELL

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section
mission from each Municipality on Account of such Cost, and the Amount Credited
Actual Cost of Power Supplied to it

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average H.P. supplied in year after correction for power factor	Share of Operating	
	To Jan. 1, 1920	To Oct. 31, 1920			Operating, Maintenance and Administrative Expenses	Interest
	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.
Beaverton	45 00	55 00	35,404 80	104.2	2,237 23	1,612 68
Brechin.....	55 00	85 00	23,263 31	34.5	899 60	1,059 65
Cannington.....	50 00	65 00	33,235 43	81.1	1,584 96	1,513 86
Kirkfield .....	.....	45 00	4,824 07	4.3	106 09	121 47
Sunderland	55 00	85 00	28,850 85	47.5	974 57	1,314 15
Woodville	55 00	80 00	26,833 02	47.9	941 63	1,222 23
Totals—Municipalities			152,411 48	319.5	6,744 08	6,844 04
Totals—Companies			169,253 95	.....	7,988 44	6,682 06
Grand Totals			321,665 43	319.5	14,732 52	13,526 10

SYSTEM

23 of the Act, of Power Supplied to it by the Commission, the Amount Received by the Com-
or Charged to each Municipality upon ascertaining by annual adjustment the
in the Year Ending 31st October, 1920

Costs and Fixed Charges			Shortage From Sale of Power to Severn System	Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts Paid to the Com- mission by each Muni- cipality	Amount Credited or charged to each Municipality upon ascertaining the Cost of Power by Annual Adjustment		Sinking Fund for the Years mentioned hereunder charged as part of the Cost of Power in the Year 1919-1920
Renewals	Contin- gencies	Sinking Fund				Credited	Charged	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
708 02	34 45	637 21	718 30	5,947 89	5,307 59	.....	640 30	1920
465 22	11 41	418 70	376 68	3,231 26	2,689 12	.....	542 14	1920
664 63	26 81	598 17	506 61	4,895 04	4,966 69	71 65	.....	1920
53 32	1 42	.....	31 28	313 58	192 37	.....	121 21	1920
576 95	15 69	519 25	332 74	3,733 35	3,767 81	34 46	.....	1920
536 60	15 83	482 94	329 74	3,528 97	3,639 48	110 51	.....	1920
3,004 74	105 61	2,656 27	2,295 35	21,650 09	20,563 06	216 62	1,303 65	.....
2,933 62	147 63	2,640 25	2,295 35	18,096 65	17,513 95	.....	*582 70	.....
5,938 36	253 24	5,296 52	.....	39,746 74	38,077 01	.....	1,669 73	.....

* Charged to Contingency Reserve.

WASDELL'S SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward, 31st October, 1919		\$14,277 43
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of		
Power delivered to them	\$105 61	
Provision against equipment employed in respect of con-		
tracts with Severn System and Companies	147 63	
Interest at 4% per annum on monthly balance to the		
credit of the account	571 10	
		<u>824 34</u>
		\$15,101 77
Expenditures (including the restringing of aluminum cable		
during the year ending 31st October, 1920	\$14,519 07	
Losses for the year on power sold to Private Companies	582 70	
		<u>\$15,101 77</u>
Balance		Nil

WASDELL'S SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for Renewals to 31st October, 1919		\$27,416 02
Deduct:		
Expenditures to 31st October, 1919		858 47
Balance brought forward, 31st October, 1919		<u>\$26,557 55</u>
Added during the year ending 31st October, 1920:		
Amounts charged to Municipalities as part of the Cost of		
Power delivered to them	\$3,004 74	
Provision against equipment employed in respect of Severn		
System and Companies	2,933 62	
Interest at 4% per annum on the monthly balances to		
the credit of the account	1,062 36	
		<u>7,000 67</u>
		\$33,558 22
Expenditures during the year ending 31st October, 1920		<u>2,284 71</u>
Balance carried forward, 31st October, 1920		\$31,273 51

WASDELL'S SYSTEM

Statement showing the Total Sinking Fund Requirements to be met by each Municipality—
Sinking Fund Requirements the payment of which has been deferred by the Commission under Section 23 of the Act—Sinking Fund Payments made
by certain Municipalities who have been operating more than five years—and the total of the Sinking Fund Payments
to 31st October, 1920

Municipality	Total Sinking Fund Requirements Charged to the Municipality under the Act		Sinking Fund Requirements the payment of which has been deferred		Sinking Fund paid (or charged) as part Payments to the Credit of the Municipality on 31st Oct., 1920	
	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount	(a) For Period of	(b) Amount
Beaverton ..	1 year ending 31st Oct., 1920,	\$ c. 637 21.	.....	\$ c.	1 year ending 31st Oct., 1920	\$ c. 637 21
Brechin.....	1 " " "	418 70	.....	.....	1 " " "	418 70
Cannington..	1 " " "	598 17	.....	.....	1 " " "	598 17
Kirkfield....	1 " " "	48 00	.....	.....	.....	.....
Sunderland .	1 " " "	519 25	.....	.....	1 year ending 31st Oct., 1920	519 25
Woodville ..	1 " " "	482 94	.....	.....	1 " " "	482 94
Totals—Municipalities		2,704 27	.....	48 00	.....	2,656 27
Totals—Companies (from commencement of operations).....		2,640 25	(nil.).....	.....	(From commencement of operations).....	2,640 25
Grand Totals		5,344 52	.....	48 00	.....	5,296 52

WASDELL'S SYSTEM

Statement showing the net charge to each Municipality in respect of Power supplied to it to 31st October, 1919—and interest added during the year, also the amount credited or charged to each Municipality in respect of Power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Charge at 31st October, 1919	Interest at 4 % per annum added during the year		Amount credited or charged in respect of power supplied in year ending 31st October, 1920		Accumulated amount standing at the Credit or Charge on 31st October, 1920	
			Charged		Credited	Charged	Credit	Charge
Beaverton	Nov., 1914.....	\$ c. 4,226 80	\$ c. 169 06		\$ c.	\$ c. 640 30	\$ c.	\$ c. 5,036 16
Brechin.....	Jan., 1915.....	2,961 78	118 47		.....	542 14	.....	3,622 39
Cannington	Nov., 1914.....	3,977 79	159 11		71 65	.....	.....	4,065 25
Kirkfield.....	June, 1920.....	.....	.....		.....	121 21	.....	121 21
Sunderland	Nov., 1914.....	3,862 42	154 51		34 46	.....	.....	3,982 47
Woodville.....	Nov., 1914.....	3,621 70	144 87		110 51	.....	.....	3,656 06
		18,650 49	746 02		216 62	1,303 65	.....	20,483 54

EUGENIA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Secs. 6c. and 23 of the Act:

Cost of operating and maintaining the Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system
Interest on Capital Investment...
Provision for renewal of Generating Plant, Lines, Stations, etc.
Provision for Contingencies:
By charges against Municipalities ..
By charges against contracts with Private Companies, also the Severn System which purchased power

\$797 75

41 00

838 75

\$169,875 52

Revenue for Period:

Collected from Municipalities
Power sold to Private Companies and to Severn System
Add amounts due by certain Municipalities being the deficiency between sums paid and the costs of power supplied to them in the period

\$119,357 98

6,585 33

40,840 36

\$166,783 67

Revenue
Loss on sale of power to Private Companies (written off against Contingency Reserve) .

3,091 85

\$169,875 52

EUGENIA SYSTEM.

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section 23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Commission from each Municipality on account of such Cost—and the Amount Credited or Charged to each Municipality upon ascertaining by annual adjustment the Cost of Power Supplied to it in the year ending October 31, 1920.

EUGENIA

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section mission from each Municipality on Account of such Cost—and the Amount adjustment the Cost of Power Supplied to

Municipality	Interim Rates per Horse Power Collected by Commission during year		Share of Capital Cost of System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Share of Operating	
	To Jan. 1, 1920	To Oct. 31, 1920			Operating, Maintenance and Administrative Expenses	Interest
	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.
Arthur	45 00	65 00	98,390 56	129.	3,753 92	4,499 10
Chatsworth	30 00	45 00	13,877 79	29.	644 92	636 05
Chesley	40 00	45 00	123,737 23	250.3	3,976 84	5,666 17
Dundalk	27 00	38 00	34,920 17	87.7	1,779 65	1,592 98
Durham	33 00	45 00	39,183 66	100.6	2,042 92	1,798 41
Elmwood	35 00	45 00	24,599 35	51.	1,058 30	1,127 40
Flesherton	26 00	36 00	22,764 99	57.3	974 55	1,044 62
Grand Valley	45 00	60 00	38,986 67	60.7	1,758 96	1,784 07
Hanover	35 00	35 00	246,672 75	593.1	9,937 09	10,655 02
Holstein	44 00	75 00	13,190 42	9.3	443 38	601 95
Hornings Mills			4,968 03	5.	1,172 27	226 80
Markdale	23 00	35 00	29,898 30	85.7	1,198 45	1,373 35
Mount Forest	40 00	55 00	94,000 21	151.6	3,364 65	4,263 76
Neustadt	42 50	45 00	48,234 10	84.2	1,747 16	2,114 63
Orangeville	35 00	55 00	89,295 98	136.2	2,958 53	4,079 91
Owen Sound	28 00	28 00	444,959 77	1,132.2	16,176 79	20,421 01
Shelburne	30 00	38 00	81,237 57	183.6	3,336 32	3,718 61
Tara	37 00	85 00	45,563 21	44.6	1,382 62	2,081 69
Totals—Municipalities			1,494,480 76	3,191.1	57,709 32	67,685 53
Totals—Companies and Severn System (which purchased power)....			201,469 53	164.	4,470 39	9,199 08
Non-operating Capital			217,815 21	.....	.....	.....
Grand Totals.....			1,913,765 50	3,355.1	62,179 71	76,884 61

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Com-
Credited or Charged to each Municipality upon ascertaining by annual
it in the Year Ending 31st October, 1920

Costs and Fixed Charges		Loss on Sale of Power to Severn System charged to Municipalities in proportion to their Maintenance Costs	Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts Paid to Commission by each Municipality	Amount charged to each Municipality upon ascertaining the Cost of Power by annual adjustment
Renewals	Contin- gencies				
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,082 86	32 25	774 36	11,142 49	7,828 36	3,314 13
241 64	7 25	94 36	1,624 22	1,192 75	431 47
2,192 07	62 57	618 67	12,518 32	10,931 72	1,586 60
531 22	21 92	254 84	4,180 61	3,092 46	1,068 15
591 92	25 15	247 42	4,705 82	4,234 08	471 74
430 28	12 75	146 85	2,775 58	2,142 32	633 26
359 74	14 32	126 59	2,519 82	1,862 98	656 84
779 10	15 17	291 53	4,628 83	3,370 25	1,258 58
3,521 28	148 27	1,435 56	25,697 22	20,757 49	4,939 73
317 74	2 33	89 98	1,455 38	650 91	804 47
112 38	1 25	81 42	1,594 12	685 26	908 86
423 93	21 42	141 64	3,158 79	2,749 04	409 75
1,829 87	37 90	637 62	10,133 20	7,961 60	2,171 60
863 30	21 05	261 55	5,007 69	3,552 07	1,455 62
1,794 47	34 05	587 22	9,454 18	6,770 41	2,683 77
6,770 82	283 05	2,192 00	45,843 67	31,702 35	14,141 32
1,343 73	45 90	530 41	8,974 97	6,558 90	2,416 67
1,037 76	11 15	270 21	4,783 43	3,315 03	1,468 40
25,224 11	797 75	8,781 63	160,198 34	119,357 98	40,846 36
4,748 34	41 00	8,781 63	9,677 18	6,585 33	*3,091 85
.....
29,972 45	838 75	.....	169,875 52	125,943 31	.....

* Charged to Contingency Reserve.

EUGENIA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$19,488 48
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$797 75	
Provision against equipment employed in respect of contracts with sundry companies	41 00	
Interest at 4% per annum on monthly balances to the credit of the account	779 54	
		<u>1,618 29</u>
		\$21,106 77
Expenditures during the year ending 31st October, 1920..	\$4,583 98	
Losses for the year on power sold to Private Companies.	3,091 85	
		<u>7,675 83</u>
Balance carried forward 31st October, 1920		\$13,430 94

EUGENIA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919		\$101,609 90
Deduct expenditures to 31st October, 1919		<u>785 58</u>
Balance brought forward 31st October, 1919		\$100,824 32
Added during the year ending 31st October, 1920:		
Amounts charged to Municipalities as part of the cost of power delivered to them	\$25,224 11	
Provision against equipment employed in respect of contracts with sundry companies	4,748 34	
Interest at 4% per annum on the monthly balance to the credit of the account	4,032 97	
Renewal reserve provided on second-hand equipment transferred	1,163 37	
		<u>35,168 79</u>
		\$135,993 11
Expenditures during the year ending 31st October, 1920		<u>230 91</u>
		\$135,762 20

EUGENIA SYSTEM

Statement showing the net credit or charge to each Municipality in respect of power supplied to it 31st October, 1919—the Cash received and applied thereon, Interest added during the year, also the amount charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Cash receipts and pay- ments on account of such charges	Interest 4% per annum added during the year		Amount charged in re- spect of power supplied in year ending 31st Oct., 1920	Accumulated amount standing at the charge on 31st October, 1920
		Credit	Charge		Credited	Charged		
Arthur	Dec., 1916.....	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Chatsworth	Dec., 1915.....	.....	6,057 46	.....	.....	242 30	3,314 13	9,613 89
Chesley	July, 1916.....	.....	1,103 74	.....	.....	44 15	431 47	1,579 36
Dundalk	Dec., 1915.....	.....	5,973 57	.....	.....	238 94	1,586 60	7,799 11
Durham	Dec., 1915.....	.....	2,617 90	.....	.....	104 72	1,088 15	3,810 77
Elmwood	Dec., 1915.....	.....	2,238 26	.....	.....	.....	1,471 74	2,799 53
Flesherton	Apr., 1918.....	.....	417 05	.....	.....	16 68	633 26	1,066 99
Grand Valley	Dec., 1915.....	.....	1,414 56	.....	.....	56 58	656 84	2,127 98
Hanover	Sept., 1916.....	.....	1,147 11	.....	.....	45 88	1,258 58	2,451 57
Holstein	May, 1916.....	.....	.....	.....	112 39	.....	4,939 73	2,017 61
Hornings Mills	July, 1916.....	2,809 73	.....	.....	.....	.....	804 47	3,569 71
Markdale	Mar., 1916.....	42 26	2,658 88	.....	.....	106 36	908 86	864 91
Mount Forest	Dec., 1915.....	.....	1,444 44	.....	1 69	.....	409 75	1,911 97
Neustadt	Dec., 1918.....	.....	13,284 85	.....	.....	57 78	2,171 60	15,987 84
Orangeville	July, 1916.....	.....	832 53	.....	.....	531 39	1,455 62	2,321 45
Owen Sound	Dec., 1915.....	.....	5,384 08	.....	.....	33 30	2,683 77	8,283 21
Shelburne	July, 1916.....	12,179 68	.....	.....	487 19	215 36	14,141 32	1,474 45
Tara	Feb., 1918.....	.....	1,397 63	74 10	.....	.....	2,416 07	3,794 42
		.....	3,783 22	.....	.....	151 33	1,468 40	5,402 95
Totals.....		15,031 67	49,755 28	74 10	601 27	1,989 12	40,840 36	76,877 72

EUGENIA RURAL LINES

Operating Account for Year Ending 31st October, 1920

		REVENUE	
Interest on Capital Investment	\$94 12	Interest and Sinking Fund collected from Municipalities which operate lines	\$124 64
Provision for Sinking Fund	30 52		
Totals	<u>\$124 64</u>	Total	<u>\$124 64</u>

Statement showing Interest and Sinking Fund Charges, 31st October, 1920

—	Capital Cost	Interest	Sinking Fund	Total Interest and Fixed Charges	Revenue from Municipalities
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Markdale	1,182 53	62 38	21 30	83 68	83 68
Flesherton	512 08	31 74	9 22	40 96	40 96
Totals	1,694 61	94 12	30 52	124 64	124 64

Statement showing the total Sinking Fund requirements of each Municipality and the total of the Sinking Fund Payments with interest allowed thereon to 31st October, 1920

—	Total Sinking Fund Requirements		Sinking Fund Paid	Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund Payments and accumulated Interest to 31st October, 1920
	Period Covered	Amount			
		\$ c.	\$ c.	\$ c.	\$ c.
Markdale	4 years ending 31st Oct., 1920	75 53	75 53	4 00	79 53
Flesherton	3 ,, ,, ,, ,,	25 36	25 36	94	26 30
Totals .....	.....	100 89	100 89	4 94	105 83

MUSKOKA SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c. and 23 of the Act:

Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this system	
Interest on Capital Investment	\$9,775 34
Provision for renewal of Generating Plant, Lines, Stations, etc.	9,661 89
Provision for Contingencies:	7,432 25
By charges against Municipalities	
By appropriating the net profits on power sold to sundry customers at Muskoka Falls	\$337 50
	31 27

Revenue for Period:

Collected from Municipalities	\$28,487 69
Power sold to sundry customers at Muskoka Falls	54 15
	<u>\$28,541 84</u>
Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	\$1,987 85
Add amounts due by certain Municipalities, being the difference between sums paid and the costs of power supplied to them in the period	684 26
	<u>1,303 59</u>

\$27,238 25

\$27,238 25

MUSKOKA SYSTEM

Statement showing the Amount to be Paid by each Municipality as the Cost—under Section 23 of the Act—of Power supplied to it by the Commission, the Amount received by the Commission from each Municipality on account of such Cost, and the amount credited or charged to each Municipality upon ascertaining by annual adjustment the actual cost of power supplied to it in the year ending 31st October, 1920

Municipality	Interim Rates per Horse Power collected by Commission during year	Share of Capital System on which Interest and Fixed Charges are payable	Average Horse Power supplied in year after correction for power factor	Share of Operating Costs and Fixed Charges				Total Cost of Power for year as provided to be paid under Section 23 of Act	Amounts paid to the Commission by each Municipality	Amounts Credited or Charged to each Municipality upon ascertaining the Cost of Power by annual adjustment	
				Operating, Maintenance and Administrative Expenses	Interest	Renewals	Contingencies			Credited	Charged
	\$ c.	\$ c.	%	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Gravenhurst	14 00	47,985 03	478.4	3,397 74	2,185 71	1,679 29	119 60	7,382 34	6,698 08	.....	684 26
Huntsville	25 00	163,848 23	871.6	6,377 60	7,463 24	5,743 02	217 90	19,801 76	21,789 61	1,987 85	.....
Totals Municipalities....	.....	211,833 26	1,350.0	9,775 34	9,648 95	7,422 31	337 50	27,184 10	28,487 69	1,987 85	684 26
Muskoka Falls (Sundry Customers).....	.....	284 01	.....	.....	12 94	9 94	.....	22 88	54 15	31 27	.....
Grand Totals .....	.....	212,117 27	.....	9,775 34	9,661 89	7,432 25	337 50	27,206 98	28,541 84	.....	.....

MUSKOKA SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$1,096 18
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$337 50	
Profit on the sales of power to sundry customers at Muskoka Falls	31 27	
Interest at 4% per annum on monthly balances to the credit of the account	43 85	
		<u>412 62</u>
Balance carried forward 31st October, 1920		\$1,508 80

MUSKOKA SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to October 31, 1919		\$20,616 59
Deduct expenditures to 31st October, 1919		<u>1,180 12</u>
Balance brought forward 31st October, 1919		\$19,436 47
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$7,422 31	
Provision against equipment in respect of Muskoka Falls	9 94	
Interest at 4% per annum on the monthly balances to the credit of the account	777 46	
		<u>8,209 71</u>
		<u>\$27,646 18</u>

MUSKOKA SYSTEM

Statement showing the net charge to each Municipality in respect of power supplied to it to 31st October, 1919,—Interest added during the year, also the amount credited or charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net charge at 31st October, 1919	Interest at 4% per annum charged during the year	Amount credited or charged in respect of power supplied in the year ending 31st October, 1920		Accumulated amount standing at the charge on 31st October, 1920
				Credited	Charged	
Gravenhurst	Nov., 1915.....	\$ c. 5,279 73	\$ c. 211 19	\$ c.	\$ c. 684 26	\$ c. 6,175 18
Huntsville	Sep., 1916.....	6,400 17	256 01	1,987 85	.....	4,668 33
Totals.....	.....	11,679 90	467 20	1,987 85	684 26	10,843 51

RIDEAU SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c. and 23 of the Act:		Revenue for Period:	
Power Purchased	\$6,705 05	Collected from Municipalities	\$62,379 78
Cost of operating and maintaining Generating Plant, Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this System	14,535 23	Add amounts due by certain Municipalities, being the difference between sums paid and the cost of power supplied to them in the period	\$5,307 53
Interest on Capital Investment	29,367 77	Deduct amounts collected from certain Municipalities in excess of the sums required to be paid by them for power supplied in the period	2,164 30
Provision for renewal of Generating Plant, Lines, Stations, etc.	14,505 58		
Provision for contingencies:			
By charges against Municipalities	409 38		3,143 23
		Revenue	65,523 01
			<u>\$65,523 01</u>

RIDEAU

Statement showing the Amount to be Paid by each Municipality as the Cost under Section
mission from each Municipality on Account of such Cost—and the Amount
adjustment the Cost of Power Supplied to

Municipality	Interim Rates per Horse Power Collected by Commission during Year		Share of Cap- ital Cost of System on which Inter- est and Fixed Charges are Payable	Average Horse Power Supplied in Year after Cor- rection for Power Factor	Cost of Power to Commission
	To May 31, 1920	From June 1, 1920			
Carleton Place.....	\$ c. 33 00	\$ c. 44 95	\$ c. 360,212 16	616.8	\$ c. 523 34
Perth	32 00	41 80	274,391 20	382.	2,289 43
Rideau Development (Power)	14 00+ 543 10 per month	.....	.....	52.	615 35
Smith's Falls	28 00	38 32	397,828 18	586.7	3,276 93
Totals.....	.....	.....	1,032,387 92	1,637.5	6,705 05

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Com-
Credited or Charged to each Municipality upon ascertaining by annual
it in the Year Ending 31st October, 1920

Share of Operating Costs and Fixed Charges				Total Cost of Power for Year as Pro- vided to be Paid under Section 23 of Act	Amounts Paid to Commission by each Municipality	Amount Credited or Charged to each Municipality upon ascertaining the Cost of Power by annual adjustment	
Operating, Maintenance and Adminis- trative Ex- penses	Interest	Renewals	Contin- gencies			Credited	Charged
\$ c. 7,034 53	\$ c. 9,318 63	\$ c. 4,603 05	\$ c. 154 20	\$ c. 21,633 75	\$ c. 23,798 05	\$ c. 2,164 30	\$ c.
3,121 37	8,306 68	4,102 73	95 50	17,915 71	14,409 44	.....	3,506 27
329 99	2,012 56	994 13	13 00	3,965 03	3,965 03	.....	.....
4,049 34	9,729 90	4,805 67	146 68	22,008 52	20,207 26	.....	1,801 26
14,535 23	29,367 77	14,505 58	409 38	65,523 01	62,379 78	2,164 30	5,307 53

RIDEAU SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$207 70
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$409 38	
Interest at 4% per annum on monthly balance to the credit of the account	8 31	
		<u>417 69</u>
Balance carried forward 31st October, 1920		\$625 39

RIDEAU SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919		\$5,153 92
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$14,505 58	
Interest at 4% per annum on the monthly balances to the credit of the account	206 16	
Renewals Reserve provided on second-hand equipment transferred	1,956 55	
		<u>16,668 29</u>
Balance carried forward 31st October, 1920		\$21,822 21

RIDEAU SYSTEM

Statement showing the Net Credit or Charge to each Municipality in respect of Power Supplied to it to 31st October, 1919—Interest Added during the Year ; also the Amount Credited or Charged to each Municipality in respect of Power Supplied in the Year Ending 31st October, 1920, and the Accumulated Amount standing as a Credit or Charge to each Municipality at 31st October, 1920

Municipality	Date Commenced Operating	Net Credit or Charge at 31st October, 1919		Interest at 4 % per annum added during the year		Amount Credited or Charged in respect of Power Supplied in the year ending 31st October, 1920		Accumulated Amount standing at the Credit or Charge on 31st October, 1920	
		Credit	Charge	Credited	Charged	Credited	Charged	Credit	Charge
Carleton Place	May, 1919.....	\$ 2,932 53 c.	\$ c.	\$ 117 30 c.	\$ c.	\$ 2,164 30 c.	\$ c.	\$ 5,214 13 c.	\$ c.
Perth.....	Feb., 1919.....	.....	1,719 27	.....	68 77	.....	3,506 27	.....	5,294 31
Smith's Falls	Sep., 1918.....	1,058 87	.....	42 35	.....	.....	1,801 26	.....	700 04
Totals .....	.....	3,991 40	1,719 27	159 65	68 77	2,164 30	5,307 53	5,214 13	5,994 35

ST. LAWRENCE SYSTEM.

Statement showing the Amount to be Paid by each Municipality as the Cost, under Section 23 of the Act—of Power Supplied to it by the Commission—the Amount Received by the Commission from each Municipality on Account of such Cost—and the Amount Charged to each Municipality upon ascertaining by annual adjustment the actual cost of Power Supplied to it in the year ending October 31, 1920.

ST. LAWRENCE

Statement Showing the Amount to be Paid by Each Municipality as the Cost—Under Section
Commission from Each Municipality on Account of Such Cost, and the amount Charged
Power Supplied to it in the Year

Municipality	Interim Rates per Horse Power Col- lected by Commis- sion during year	Share of Capital Cost of System on which In- terest and Fixed Charges are Payable	Average Horse Power Supplied in Year after Cor- rection for Power Factor	Cost of Power to Commis- sion	Share of Operating	
					Operating Mainten- ance and Adminis- trative Expenses	Interest
Brockville.....	45.19	\$ c. 278,187 28	1,004.8	\$ c. 15,967 69	\$ c. 7,597 29	\$ c. 12,578 99
Chesterville.....	76.73	68,756 78	148.	2,352 28	1,928 13	3,118 78
Prescott.....	44.93	52,249 25	201.8	3,207 32	1,833 87	2,353 66
Williamsburg	50.00	4,527 60	18.6	260 42	370 16	206 23
Winchester	69.84	31,320 13	83.9	1,333 47	1,785 04	1,419 19
Totals—Municipalities		435,041 04	1,457.1	23,121 18	13,514 49	19,676 85
Totals—Companies.....		107,798 24	666.6	10,589 66	3,420 74	4,851 14
Non-Operating Capital.....		98,294 31	.....	.....	.....	.....
Grand Totals		641,133 59	2,123.7	33,710 84	16,935 23	24,527 99

SYSTEM

23 of the Act—of Power Supplied to it by the Commission—The Amount Received by the to Each Municipality upon ascertaining by annual adjustment the actual cost of Ending 31st October, 1920.

Costs and Fixed Charges			Total Cost of Power for Year as Pro- vided to be Paid Under Sec. 23 of Act	Amounts Paid to the Commission by each Municipality	Amounts Charged to each Munici- pality upon ascertaining the Cost of Power by Annual Adjustment	Sinking Fund for the years mentioned hereunder charged as part of the Cost of Power in the year 1919-1920
Renewals	Contingen- cies	Sinking Fund				
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	
11,045 10	1,507 20	.....	*48,696 27	45,405 27	3,291 00	.....
2,738 46	222 00	1,232 00	*11,591 65	11,187 08	404 57	1919-1920
2,066 65	302 70	930 00	10,694 20	9,064 58	1,629 62	1919-1920
181 08	27 90	.....	1,045 79	929 16	116 63	.....
1,246 13	125 82	560 76	6,470 41	5,857 23	613 18	1919-1920
17,277 42	2,185 62	2,722 76	78,498 32	72,443 32	6,055 00	.....
4,259 59	999 90	1,916 91	26,037 94	22 870 72	*3,167 22	.....
.....
21,537 01	3,185 52	4,639 67	104,536 26	95,314 04	.....	.....

*Charged to Contingency Reserve.

ST. LAWRENCE SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919—		\$1,555 24
Added during the year ending 31st October, 1920 —		
Amount charged to Municipalities as part of the cost of power delivered to them	\$2,185 62	
Provision against equipment employed in respect of contracts with company	999 90	
Interest at 4% per annum on the monthly balances to the credit of the account	62 20	
		<u>3,247 72</u>
		\$4,802 96
Deduct:—		
Loss for year on power sold to Private Companies	\$3,167 22	
Expenditures during the year ending 31st October, 1920	543 07	
		<u>3,710 29</u>
Balance carried forward 31st October, 1920		\$1,092 67

ST. LAWRENCE SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals 31st October, 1919—		\$47,406 30
Deduct expenditures to 31st October, 1919—		<u>479 03</u>
Balance brought forward 31st October, 1919		\$46,927 27
Added during the year ending 31st October, 1920:		
Amount charged to Municipalities as part of the cost of power delivered to them	\$17,277 42	
Provision against equipment employed in respect of contracts with Private Companies	4,259 59	
Interest at 4% per annum on the monthly balances to the credit of the account	1,877 09	
		<u>23,414 10</u>
		\$70,341 37
Expenditures during the year ending 31st October, 1920		<u>1,430 70</u>
		\$68,910 67

ST. LAWRENCE SYSTEM.

Statement showing the Total Sinking Fund Requirements to be met by each Municipality—Sinking Fund Requirements, the Payment of which has been Deferred by the Commission under Section 23 of the Act—Sinking Fund Payments made by Certain Municipalities who have been operating more than Five Years—and the Total of such Sinking Fund Payments to October 31, 1920.

ST. LAWRENCE

Statement Showing the Total Sinking Fund Requirements to be met by each Municipality.
Section 23 of the Act—Sinking Fund Payments made by Certain Municipalities
Fund Payments to

Municipality	Total Sinking Fund Requirements Chargeable to the Municipality under the Act	
	(a) For period of	(b) Amounts
		\$ c.
Brockville	1 year ending Oct. 31, 1920	4,970 18
Chesterville.....	1 " " " "	1,232 00
Prescott.....	1 " " " "	930 00
Williamsburg	1 " " " "	81 49
Winchester	1 " " " "	560 76
Totals—Municipalities		7,774 43
Totals—Companies (from commencement of operations).....		1,916 91
Grand Totals		9,691 34

SYSTEM

Sinking Fund Requirements, the Payment of which has been Deferred by the Commission under who have been Operating more than Five Years—and the Total of such Sinking 31st, October, 1920

Sinking Fund Requirements, the payment of which has been deferred		Sinking Fund Requirements paid (or charged) as part of the Cost of Power	
(a) For period of	(b) Amounts	(a) For period of	(b) Amounts
	\$ c.		\$ c.
1 year ending Oct. 31, 1920	4,970 18	.....	.....
.....	.....	1 year ending Oct. 31, 1920	1,232 00
.....	.....	1 " " " "	930 00
1 year ending Oct. 31, 1920	81 49	.....	.....
.....	.....	1 year ending Oct. 31, 1920	560 76
.....	5,051 67	.....	2,722 76
(Nil)	.....	(From commencement of operations)	1,916 91
.....	5,051 67	.....	4,639 67

ST. LAWRENCE SYSTEM

Statement showing the net charge to each Municipality in respect of power supplied to it to 31st October, 1919—interest added during the year,
Also the amount charged to each Municipality in respect of power supplied in the year ending 31st October, 1920, and the
accumulated amount standing as a charge to each Municipality at 31st October, 1920

Municipality	Date commenced Operating	Net charge at 31st October, 1919	Interest at 4 % per annum charged during the year	Amount charged in respect of power sup- plied in year ending 31st October, 1920	Accumulated amount standing at the charge on 31st Octo- ber, 1920
Brockville	April, 1915.....	\$ c. 10,606 71	\$ c. 424 28	\$ c. 3,291 00	\$ c. 14,321 99
Chesterville	March, 1914.....	8,166 41	326 65	404 57	8,897 63
Prescott	Dec., 1913.....	2,438 17	97 53	1,629 62	4,165 32
Williamsburg	April, 1915.....	1,376 26	55 05	116 63	1,547 94
Winchester.....	Jan.. 1914.....	4,542 46	181 69	613 18	5,337 33
Totals.....	.....	27,130 01	1,085 20	6,055 00	34,270 21

THUNDER BAY SYSTEM

Operating Account for Year Ending 31st October, 1920

Costs of operation as provided for under Sections 6c and 23 of the Act:		Revenue for Period:	
Power Purchased	\$81,945 00	Collected from City of Port Arthur	\$114,199 64
Costs of operating and maintaining the Transmission Lines, Stations, etc., including the proportion of Administrative expenses chargeable to the operation of this System.		Less amount collected from Port Arthur in excess of the sum required to be paid by it for power supplied in the period	10,251 59
Interest on Capital Investment	8,963 08	Revenue	\$103,948 05
Provision for renewal of Lines, Stations, etc....	5,395 44		
Provision for Contingencies	4,145 32		
Provision for Sinking Fund	1,367 07		
	2,132 14		
	<u>\$103,948 05</u>		<u>\$103,948 05</u>

THUNDER BAY

Statement showing the amount to be paid by the City of Port Arthur as the cost—under section
sion from that Municipality on account of such cost—and the amount credited to
supplied to it in the year

Municipality	Interim Rate per Horse Power Collected by Commission during year	Capital Cost of System on which Interest and Fixed Chgs. are payable	Average Horse Power supplied in year after correction for power factor	Cost of Power to Commis- sion	Operating
					Operating, Main- tenance and Ad- ministrative Expenses
Port Arthur...	\$ c. 19 75 517.22 per month	\$ c. 118,452 67	5,468.3	\$ c. 81,945 00	\$ c. 8,963 08

Non-operating Capital—
Nipigon Power Development
and Transmission Line 4,001,968 02
4,120,420 69

SYSTEM

23 of the Act—of power supplied to it by the Commission, the amount received by the Commis Port Arthur upon ascertaining by annual adjustment the actual cost of power ending 31st October, 1920

costs and fixed charges				Total Cost of Power for year as provided to be paid under Section 23 of Act	Amount paid to the Commis- sion by the Municipality	Amount credited to Port Arthur upon ascertain- ing the cost of power by annual adjustment
Interest	Renewals	Contingen- cies	Sinking Fund			
\$ c. 5,395 44	\$ c. 4,145 32	\$ c. 1,367 07	\$ c. 2,132 14	\$ c. 103,948 05	\$ c. 114,199 64	\$ c. 10,251 59

THUNDER BAY SYSTEM

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919		\$2,776 36
Added during the year ending 31st October, 1920:		
Amount charged to Port Arthur as part of the cost of power delivered to them	\$1,367 07	
Interest at 4% per annum on the monthly balances to the credit of the account	111 05	
		<u>1,478 12</u>
Balance carried forward 31st October, 1920		\$4,254 48

THUNDER BAY SYSTEM

Reserve for Renewals Account—31st October, 1920

Balance brought forward 31st October, 1919		\$34,210 09
Deduct expenditures to 31st October, 1919		<u>9 75</u>
		\$34,200 34
Added during the year ending 31st October, 1920:		
Amount charged Port Arthur as part of the cost of power delivered to them	\$4,145 32	
Interest at 4% per annum on the monthly balances to the credit of the account	1,368 01	
		<u>5,513 33</u>
Balance carried forward 31st October, 1920		\$39,713 67

THUNDER BAY SYSTEM.

Statement showing the Total Sinking Fund Requirements of the City of Port Arthur, Sinking Fund Payments made by it, and the Total of such Sinking Fund Payments, with interest allowed thereon, to October 31, 1920.

Statement showing the Net Credit to the City of Port Arthur in respect of Power Supplied to it to 31st October, 1919, interest added during the year; also the amount credited to Port Arthur in respect of Power Supplied to it in the year ending 31st October, 1920; and the accumulated amount standing as a credit to that Municipality at 31st October, 1920.

THUNDER BAY

Statement showing the total Sinking Fund requirements of the City of Port Arthur
with interest allowed thereon

Municipality	Sinking Fund Requirements	
	Period Covered	Amount
Port Arthur	10 years ending 31st Oct., 1920	\$ c. 17,437 40

THUNDER BAY

Statement showing the Net Credit to the City of Port Arthur in respect of Power supplied
Arthur in respect of Power supplied to it in the year ending 31st October, 1920,

Municipality	Date commenced operating	Net Credit at 31st October, 1919
Port Arthur	Dec., 1910	\$ c. 17,621 72

SYSTEM

Sinking Fund payments made by it, and the total of such Sinking Fund payments, to October 31, 1920

Sinking Fund Paid		Interest at 4% per annum allowed on Sinking Fund Payments	Total Sinking Fund Payments and Accumulated Interest to 31st October, 1920
Period Covered	Amount		
Full Period	\$ c. 17,437 40	\$ c. 3,009 58	\$ c. 20,446 98

SYSTEM

o it 31st October, 1919, interest added during the year ; also the amount credited to Port and the accumulated amount standing as a credit to that Municipality at 31st October, 1920

Interest at 4% per annum credited during the year	Amount credited in respect of Power supplied in year ending 31st October, 1920	Accumulated Amount standing as a Credit on 31st October, 1920
\$ c. 704 87	\$ c. 10,251 59	\$ c. 28,578 18

CENTRAL ONTARIO SYSTEM

Operated by The Hydro-Electric Power Commission of Ontario—Statement of Assets and Liabilities—31st October, 1920

Assets.		Liabilities.	
Central Ontario:		Provincial Treasurer:	
Power Development and Hydraulic Rights	\$4,508,528 73	Purchase Price of System	\$8,350,000 00
Transformer Stations	1,084,472 00	Debentures issued in connection with purchase of Bruton Township Pulpwood Area..	225,000 00
Transmission Lines	1,714,513 37	Cash Advances	3,598,185 00
	\$7,307,514 10		\$12,173,185 00
Local Utilities—Electric, Gas, Water and Street Railway	2,199,508 38	Accounts payable and accrued charges	\$217,458 25
Nipissing:		Consumers' Deposits	7,146 85
Power Development and Steam Plant	\$363,297 90	Unearned Water Rates	2,200 00
Transmission Lines	43,322 00		
Transformer Stations	35,492 22	Reserved for renewals	226,805 10
		Reserved for contingencies	812,509 75
Local Utilities—Electric	442,112 12		10,763 90
Rural Lines	170,678 73	Reserved for Sinking Fund:	
Pulp Mill and Pulpwood Areas	30,812 16	For retirement of bonds issued in purchase of Bruton Township Pulpwood Areas	18,803 52
	454,227 79		
	\$10,604,853 28	For repayment of cost of mill at Bancroft	1,177 53
Investments:		In respect of Rural Lines	1,235 31
Town of Trenton Debentures, re Sale of Water-works	20,352 04		
Cash in Bank	4,590 32		
Inventories:			
Tools and Equipment	50,631 09		
Materials and Supplies	380,749 49		
	\$431,380 58		
Accounts Receivable:			
Power and Pulpmill Accounts....	\$164,733 94		
Consumers' Supply—Sales Ac- counts	35,581 35		
Consumers' Light and Power Ac- counts	30,049 75		
	230,365 04		
Less Reserved for Doubtful Accounts	8,209 43		
	222,155 61		

Due by The Hydro-Electric Power Commission of Ontario	\$1,719,472 22
Advances on contracts for pulpwood	11,904 42
Expenses and insurance prepaid	8,116 89
Deferred maintenance, <i>re</i> Insulation of Transmission Lines, chargeable to future operation	54,123 85
Operating deficit	167,530 90
	<hr/>
	\$13,244,480 11

\$13,244,480 11

Surplus Account

Debit balance brought forward October 31, 1919			
Deficit to October 31, 1919 (on both Hydro and Municipal Accounts) in respect of Oshawa Rural Lines, now transferred to Surplus Account.....		Net operating surplus for year ending October 31, 1920	136,716 13
Further provision for Water Rentals accrued for the period March 1, 1916, to October 31, 1919	5,229 90	Balance—as shown on Statement of Assets and Liabilities	167,530 90
	107,627 79		
	<u>\$304,247 03</u>		<u>\$304,247 03</u>

CENTRAL ONTARIO SYSTEM

Reserve for Renewals Account—31st October, 1920

Total provision for renewals to 31st October, 1919	\$611,650 76
Deduct:	
Expenditures to 31st October, 1919	6,491 83
Balance brought forward 31st October, 1919	605,158 93
Added during the year ending 31st October, 1920:	
By charges against operations	\$196,726 30
Interest at 4% per annum on the monthly balances to the credit of the account	24,295 06
	221,021 36
	\$826,180 29
Deduct:	
Expenditures during the year ending 31st October, 1920	13,670 54
Balance carried forward 31st October, 1920	\$812,509 75

Reserve for Contingencies Account—31st October, 1920

Balance brought forward 31st October, 1919	\$5,686 27
Added during the year ending 31st October, 1920:	
By charges against operations	\$6,835 35
Interest at 4% per annum on the monthly balances to the credit of the account	177 28
	7,012 63
	\$12,698 90
Deduct:	
Expenditures to cover contingencies met with during the year ending 31st October, 1920	1,935 00
Balance carried forward 31st October, 1920	\$10,763 90

HYDRO-ELECTRIC POWER COMMISSION OF ONTARIO

Account with the Provincial Treasurer for the Year Ending 31st October, 1920

Oct. 31, 1920:			
Cheque to cover interest to date	\$2,767,263 07		
Nov. 1, 1919 to Oct. 31, 1920:			
Provincial expenditures	226,551 00		
Balance carried down	66,322,950 10		
Nov. 1, 1919:			
Balance Brought Down:			
General Account	\$25,517,816 10		
Chippawa Development Account.	11,075,000 00		
Central Ontario System Account	11,643,185 00		
			\$48,236,001 10
Nov. 1, 1919 to Oct. 31, 1920:			
Sundry Cash Advances:			
General Account	\$6,261,500 00		
Chippawa Development Account..	11,285,000 00		
Central Ontario System Account.	530,000 00		
Provincial Expenditures Account	237,000 00		
			\$18,313,500 00
Oct. 31, 1920:			
Interest on balances from Nov. 1, 1919, to Oct. 31, 1920		2,767,263 07	
			\$69,316,764 17
Nov. 1, 1920:			
Balance			\$66,322,950 10

SECTION III

MUNICIPAL ACCOUNTS

The Municipal Accounts section of this report presents the results of the operation of the various Hydro systems from a municipal standpoint, collectively and individually. Statements prepared from figures extracted from the books of all Hydro municipalities are submitted herein to show how each has operated during the past two years, also the financial status at the present time, as well as much useful statistical information, so arranged as to permit of comparisons being made between systems and different towns on each system.

The books of account in all municipalities which have contracted with this Commission for a supply of power are kept in accordance with the "Uniform Accounting for Municipal Electric Utilities" published by the Commission, and by a system of periodical inspections and reports, the Commission keeps in close touch with operating conditions of each local system.

During the year 1920, the work of installing the system was carried on in the following municipalities, as each was ready for the service, and usually simultaneously with the inauguration of the power service: Barton Township, Glencoe, Kirkfield, Lakefield, Parkhill, Port Colborne and York Township.

Periodical inspections were made of the books of all Hydro municipalities, and the local officials have been assisted in the improvement of their office routine, with a view to standardizing as far as possible the methods employed. In the majority of the smaller municipalities, much of the book-keeping was done by representatives of the Municipal Audit Department in order to insure the employment of proper classifications of Revenue and Expenditures and to save time in preparation of reports. The books of all municipal systems were closed at the end of the year by this department, in order to insure compliance with all the requirements of the Standard Accounting system, and to make certain that the accounts represent as truly as possible the actual operating results for the year.

The first statement of the preface presents consolidated operating reports for each year since Hydro was inaugurated and combines the results of all the systems. Study of this report will show that the revenue has been increasing annually to a most satisfactory degree, and the increase of 1920 over 1919 was the most marked of all, being more than double the increase of any previous year. The operating expenses too have kept pace with the revenue, and in spite of the ever increasing cost of the municipal service, the annual surpluses after providing all possible cost of operation, including an adequate depreciation charge, have increased annually until in 1920 the combined surpluses amounted to \$703,533.13.

The second statement presents consolidated balance sheets for each year since 1912 in which the march of progress is also quite manifest. It is worth noting that the total plant value has increased from \$10,081,469.16 in 1913 to \$27,059,400.10 in 1920, and the total assets from \$11,907,826.86 to \$34,615,360.94. The liabilities have not increased in the same proportion as the assets, rising from \$10,468,351.79 to \$22,265,175.22. The reason for this is that much of the cost of the increasing plant value has been financed out of Surplus and Reserve accounts without increasing the liabilities of the various systems. In this way the funds of every system are used to best advantage. Examination of the results will also show a steady decline in the percentage of net debt to total assets of from 88.0 per cent. in 1913 to 65.3 per cent. in 1920.

The seven statements following these consolidated reports, show the results of operation and the financial status of each municipal system, some of the figures being comparative for the past two years and others for all the years of operation. The figures are arranged in groups according to system and alphabetically for municipalities in each system.

“Statement A” shows comparative balance sheets for each municipality for the past two years, with the plant value subdivided into the general natural subdivisions provided in the standard accounting system and showing also the other items making up the total assets. It is to be noted that among the assets there are items entitled “Equity in Hydro System,” representing the amount of accumulated Sinking Fund paid by the various municipalities through the medium of “Power Cost” toward the ultimate retirement of the “Hydro-Electric Power Commission’s construction debt.” The total accumulation to the end of 1920 is shown on the Consolidated Balance sheet as \$531,299.63.

There are also items entitled “Equity in Rural Lines” representing the Sinking Fund accumulated on lines serving rural customers, which lines were built by the Commission but are operated by municipal systems, the Commission charging Interest and Sinking Fund on the Capital expended. The total accumulation to the end of 1920 was \$46,284.43.

Another account entitled “Hydro-Electric Commission Operating Account” will be seen among the assets. This represents the amount owing by this Commission on surplus account of past years, and standing to the municipalities’ credit on the books of the Commission at the end of October, 1920. As the Commission operates only in trust for all municipalities, the result of a year’s operation, if a surplus, is credited to the municipal system entitled thereto, likewise a deficit becomes a charge to the municipality on whose account it is incurred and the liabilities show the corresponding amounts owing to this Commission for deficits in past years. The total owing by municipal systems at the end of 1920 was \$409,463.27, and the total amount owing to local systems was \$574,952.96.

The liabilities of each local system are set out under their general subdivisions, Debentures, Accounts Payable, Overdraft and other liabilities, as well as the account mentioned above, also the totals, while all the Reserves, such as Debentures Paid, Sinking Fund Reserves, Equity Reserves and Depreciation, which all form part of the gross surplus from operation, are shown separately. These when combined with the net surplus show the true operating results of each system since its inception.

The percentage of net debt to total assets is also shown, to give some idea of the solvency of each system and of the remarkable progress made by some towards wiping out their initial construction debts.

In this connection it might be well to mention a few outstanding cases where no debt exists at all or where the liquid assets are sufficient to liquidate the outstanding liabilities for debentures and accounts payable;—

	Liabilities	Liquid Assets
Baden	4,170 17	6,405 12
Beachville	4,448 04	10,768 37
Georgetown	17,876 51	21,147 67
Hagersville	6,853 28	7,357 05
Mitchell	3,879 85	6,363 71
New Toronto	9,922 02	47,330 89
St. George	5,481 35	5,878 72
Tavistock	5,635 74	10,292 29
and many others are rapidly approaching this condition.		

"Statement B" is a consolidated condensed operating report, showing the essential figures of each municipal system's operation, so the various results can be compared at a glance. The population served by each system as well as the number of customers served and the load taken in December, 1920, are also shown, to give an idea of the size of the utilities.

"Statement C" shows comparative detailed operating reports for each utility for 1919 and 1920 where the operation has been for two years and for 1920 only where the service was inaugurated during that year. In these reports the cost of power includes the adjustment made by this Commission covering the difference between the cost of the service to the Commission, and the total of the twelve monthly bills rendered during the year so the true cost of power is reflected in the municipal figures.

The operating revenues for 1920 have been subdivided to show the earnings from municipal power services and rural services which classifications have attained quite important proportions in the total revenue of many municipalities.

Of the 125 utilities operated in the Niagara System, only three—Louth Township, Dereham Township and Vaughan Township—were unable to meet the actual operating expenses out of revenue to the extent of \$958.74 and adjustments in rates have now remedied the condition resulting in the deficiency of revenue in the past, while 12, including the 3 above, were unable to provide all of the regular depreciation charge to the extent of \$8,646.43. Compared with 1919, this year's operation shows a marked improvement since 1919—11 showed gross losses of \$3,348.54 and 24 net losses of \$16,543.82 after depreciation charges were made.

"Statement D" shows the revenue, kilowatt hour consumption, number of consumers, average monthly bill and net average cost per kilowatt hour for domestic and commercial service since Hydro was installed in each municipality and the average cost per horse-power billed, since 1917.

In many municipalities the average monthly bill has increased during the past year due to the institution of the minimum bill system which at the same time increased the average cost per kw. hour where the consumption did not increase to take up the minimum. In other municipalities the monthly bill has been steadily declining as has been the cost per kw. hour due to the constantly increasing use of appliances and the consequent large number of kw. hours at the low rates.

"Statement E" shows the installation of street lights in each municipality with the rates set by this Commission, the revenue for 1920 and the cost per capita in each.

"Statements F and G" contain the rates in use by each utility, also those charged by this Commission on the interim power bills.

On the whole, close study of these various reports reveals the fact that Hydro business in general and Hydro municipalities in particular, are in a most satisfactory condition financially, and this condition meets every criticism of municipal ownership and operation of electric utilities as carried on under the control of this Commission.

Consolidated Operating Reports

CONSOLIDATED

	1912	1913	1914
Number of Municipalities included.....	28	45	69
EARNINGS.	\$ c.	\$ c.	\$ c.
Domestic Light.....		572,154 38	789,130 81
Commercial Light.....		525,438 16	673,803 92
Power.....		905,378 17	1,214,829 31
Power Municipal.....			
Street Light.....		560,925 56	698,409 71
Rural.....			
Miscellaneous.....		53,543 24	57,482 41
Total.....	1,617,674 00	2,617,439 51	3,433,656 16
EXPENSES.			
Power Purchased.....		789,632 87	1,045,752 65
Sub-Stn. Operation.....		78,394 81	97,658 90
“ “ Maintenance.....		18,698 46	31,790 99
Dist. System, Operation and Maintenance.....		104,114 51	130,998 65
Line Transformer Maintenance.....		8,547 61	11,764 32
Meter.....		5,222 19	9,536 07
Consumers' Premises Expenses.....		53,108 38	65,192 23
Street Light System, Operation and Maintenance.....		84,903 76	113,047 80
Promotion of Business.....		72,303 51	86,683 02
Billing and Collecting.....		77,351 76	103,560 71
General Office, Salary and Expenses.....		154,932 69	230,899 75
Undistributed Expenses.....		64,538 69	81,261 28
Interest and Debenture Payments.....		528,549 21	662,092 34
Miscellaneous Expenses.....		884 95	8,089 63
Total Expenses.....	1,377,168 00	2,041,183 40	2,678,328 34
Surplus.....	240,506 00	576,256 11	755,327 82
Depreciation Charge.....	124,992 47	262,675 24	357,883 31
Surplus Less Depreciation Charge.....	115,513 53	313,580 87	397,444 51

OPERATING REPORTS

1915	1916	1917	1918	1919	1920
99	128	143	166	181	186
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
944,271 08	1,172,878 96	1,417,460 31	1,632,272 12	1,991,632 31	2,546,345 30
720,209 26	812,130 78	899,023 72	968,399 42	1,175,143 56	1,512,854 63
1,501,797 78	1,921,152 31	2,665,280 65	3,417,248 37	3,443,107 13	3,752,188 22
835,970 87	930,057 48	967,495 10	902,875 55	988,900 95	532,279 09
68,046 29	147,381 50	120,805 39	161,243 70	228,270 65	1,005,535 11
4,070,295 28	4,983,601 03	6,070,065 17	7,082,039 16	7,827,054 60	168,919 95
					189,778 63
					9,707,900 93
1,485,614 73	1,959,446 83	2,563,880 17	2,807,769 33	3,284,490 68	4,216,667 87
107,607 31	153,761 08	203,091 20	238,257 34	217,638 89	285,407 35
25,935 56	46,131 53	42,129 04	60,805 92	81,853 63	102,050 81
154,409 71	154,247 17	169,326 24	223,347 81	286,310 76	344,551 57
11,508 92	14,528 17	25,328 95	30,488 83	42,509 12	46,323 09
12,899 14	24,218 48	44,461 55	63,155 56	78,726 64	123,701 18
47,494 26	52,602 01	61,765 14	65,149 59	84,301 24	116,283 52
136,983 38	145,471 50	157,857 73	196,157 18	215,963 86	236,930 79
74,402 55	79,324 85	73,516 37	64,962 78	77,789 22	78,294 85
131,541 27	154,508 58	188,083 84	208,660 76	236,504 75	295,942 88
236,777 86	306,709 35	349,932 05	421,680 15	452,131 22	559,695 29
94,978 89	88,646 53	79,462 36	106,229 25	186,686 29	250,317 29
817,978 89	951,781 99	1,085,180 80	1,238,425 53	1,285,571 51	1,431,807 16
34,230 26	8,687 44	23,476 44	11,244 82	4,003 80	6,083 04
3,371,414 00	4,140,065 51	5,077,491 08	5,736,334 85	6,531,481 61	8,094,056 69
698,881 28	843,535 52	992,574 09	1,345,704 31	1,295,572 99	1,613,844 24
414,506 99	486,141 80	607,296 29	718,162 30	814,219 37	902,028 75
284,374 29	357,393 72	385,367 80	627,542 01	481,353 62	711,815 49

CONSOLIDATED

	1913	1914
	45	69
	\$ c.	\$ c.
ASSETS		
Lands and Buildings.....	626,707 34	791,732 20
Sub-Station Equipment.....	1,090,875 69	1,476,087 84
Distribution System, Overhead.....	2,690,834 74	3,422,763 93
Distribution System, Underground.....	644,514 24	807,153 53
Line Transformers.....	615,546 20	787,613 52
Meters.....	840,606 64	1,172,475 11
Street Light Equipment, Regular.....	900,614 80	1,071,255 37
Street Light Equipment, Ornamental.....	62,765 34	270,386 55
Miscellaneous Construction Expenses.....	866,551 89	2,062,035 90
Steam or Hydraulic Plant.....	1,401,175 28	420,108 33
Old Plant.....	341,277 00	619,513 12
Total Plant.....	10,081,469 16	12,901,125 40
Bank and Cash Balance.....	450,887 97	422,350 12
Securities and Investments.....		
Accounts Receivable.....	344,487 95	561,873 08
Inventories.....	540,274 58	615,226 76
Sinking Fund on Local Debentures.....	431,747 27	625,217 03
Equity in Hydro System.....		
Equity in Rural Lines.....		
Other Assets.....	58,959 93	123,410 97
H.E.P.C. Operating Account.....		
Total Assets.....	11,907,826 86	15,249,203 36
LIABILITIES		
Debenture Balance.....	8,711,308 37	10,678,078 36
Accounts Payable.....	1,553,711 45	1,682,150 29
Bank Overdraft.....	160,919 16	228,622 50
Other Liabilities.....	42,412 81	113,838 66
H.E.P.C. Operating Account.....		
Total Liabilities.....	10,468,351 79	12,702,689 81
RESERVES		
Debentures Paid.....	202,751 26	320,129 10
Sinking Fund Reserve.....	431,747 27	625,217 03
Reserve for Equity in Hydro System.....		
Reserve for Equity in Rural Lines.....		
Depreciation Reserve.....	478,145 88	850,618 07
Total Reserves.....	1,112,644 41	1,795,964 20
Surplus.....	326,830 66	750,549 35
Total.....	11,907,826 86	15,249,203 36
Percentage of Net Debt to Total Assets.....	88.0%	83.0%

BALANCE SHEETS

1915	1916	1917	1918	1919	1920
99 \$ c.	128 \$ c.	143 \$ c.	166 \$ c.	191 \$ c.	195 \$ c.
873,838 18	1,335,936 33	1,546,241 41	1,859,888 69	1,995,545 83	2,175,568 24
1,582,062 56	1,934,626 12	2,471,293 82	2,820,448 70	2,915,125 56	3,231,050 80
4,234,626 05	4,832,353 27	6,080,073 42	6,627,237 39	7,445,820 31	8,579,881 49
928,420 77	1,095,709 62	1,157,059 90	1,216,288 59	1,206,296 88	1,313,369 29
981,754 70	1,179,132 07	1,483,839 44	1,772,691 35	2,073,113 45	2,560,581 59
1,418,165 08	1,711,299 49	1,999,095 48	2,238,143 70	2,587,566 32	3,053,135 20
1,309,628 49	1,251,057 13	1,237,734 69	1,200,625 65	1,206,638 71	1,269,006 98
197,644 82	306,388 95	361,975 74	531,502 61	546,497 68	557,678 13
1,701,182 66	2,059,263 42	2,184,015 84	2,395,096 50	2,530,101 08	2,697,636 12
461,651 60	864,500 01	896,753 20	214,575 75	986,200 57	757,194 47
1,184,372 86	759,748 66	649,852 51	1,476,413 00	805,959 89	864,298 39
14,873,347 77	17,330,015 07	20,077,935 45	22,352,951 93	24,298,866 28	27,059,400 70
284,653 96	1,061,029 90	340,026 50	391,194 91	462,437 23	943,858 12
602,920 69	695,152 23	1,285,097 33	1,124,018 44	627,076 53	341,855 88
726,556 76	764,504 59	1,261,398 36	972,996 96	1,356,565 14	1,447,585 92
868,983 78	1,166,017 73	1,337,578 96	1,663,298 05	1,032,569 75	1,400,671 89
				1,925,455 77	2,244,004 34
				344,410 94	531,299 63
				24,660 95	46,284 43
326,801 11	342,215 87	125,240 05	444,787 63	86,216 05	25,447 07
				564,601 55	574,952 96
17,683,264 07	21,358,935 39	24,427,276 65	26,949,247 92	30,722,860 19	34,615,360 94
11,831,811 03	15,058 641 57	15,593,773 61	17,209,217 70	18,133,462 44	19,268,072 04
2,040,038 01	969,187 75	1,537,669 11	1,007,727 79	1,137,705 04	1,430,674 27
292,106 44	178,413 26	886,177 94	576,816 49	403,235 57	514,671 99
37,388 31	491,874 90	429,104 20	350,013 21	670,271 90	642,293 65
				283,221 62	409,463 27
14,201,343 79	16,698,117 48	18,446,724 86	19,143,775 19	20,627,896 57	22,265,175 22
394,466 22	549,778 59	694,797 90	920,076 56	1,328,657 68	1,440,156 52
868,983 78	1,165,785 94	1,340,615 38	1,662,602 69	1,754,020 37	2,246,474 47
				344,410 94	531,299 63
				29,460 95	46,284 43
1,337,739 73	1,843,804 68	2,463,723 83	3,133,550 17	3,750,162 28	4,788,645 03
2,601,189 73	3,559,369 21	4,499,137 11	5,716,229 42	7,206,712 22	9,052,860 08
880,730 55	1,101,448 70	1,481,414 68	2,089,243 31	2,888,251 40	3,297,325 64
17,683,264 07	21,358,935 39	24,427,276 65	26,949,247 92	30,722,860 19	34,615,360 94
80.3%	78.4%	75.5%	71.0%	67.9%	65.3%

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM

Municipality	Acton		Ailsa Craig		Ancaster
Population	1,563		447		Township
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings	1,500 00	1,500 00			
Sub-Station Equipment	597 62	597 62			
Distribution System, Overhead	6,095 71	9,386 96	5,536 88	6,352 68	11,547 75
Dist. System, Underground					
Line Transformers	2,807 19	3,176 03	1,445 32	2,020 97	1,992 64
Meters	3,121 96	3,503 39	1,145 32	1,317 69	3,107 98
Street Light Equipment, Regular	944 21	956 08	362 97	362 97	455 25
Street Light Equip., Ornamental					
Miscellaneous Construction Exp.	777 99	1,804 29	273 73	492 36	1,147 70
Steam or Hydraulic Plant					
Old Plant	3,481 50	3,481 50			
Total Plant	19,326 18	24,405 87	8,764 22	10,546 67	18,251 32
Bank and Cash Balance	2,918 50	562 13	185 73		528 92
Securities and Investments	1,000 00	1,000 00	1,000 00	1,000 00	
Accounts Receivable	51 55	67 57	86 24	12 06	
Inventories	1,821 31	1,561 48	147 01		
Sinking Fund on Local Debentu's					
Equity in Hydro System	877 47	1,354 12			
Equity in Rural Lines					610 61
Other Assets					390 57
H.E.P.C. Operating Account	2,437 39	3,109 14	1,219 01	2,532 87	
Total Assets	28,432 40	32,060 31	11,402 21	14,091 60	19,781 42
Deficit					
Total	28,432 40	32,060 31	11,402 21	14,091 60	19,781 42
LIABILITIES					
Debenture Balance	6,751 50	6,407 01	6,747 99	6,606 60	17,000 00
Accounts Payable		488 00	455 52	414 59	172 07
Bank Overdraft				700 75	
Other Liabilities					
H.E.P.C. Operating Account					
Total Liabilities	6,751 50	6,895 01	7,203 51	7,721 94	17,172 07
RESERVES					
Debentures Paid	7,748 50	8,092 99	134 65	276 04	
Sinking Fund Reserve					
Reserve for Equity in Hydro Sys.	877 47	1,354 12			
Reserve for Equity in Rural Lines					610 61
Depreciation Reserve	3,870 00	4,591 00	1,201 00	1,615 00	
Total Reserves	12,495 97	14,038 11	1,335 65	1,891 04	610 61
Surplus	9,184 93	11,127 19	2,863 05	4,478 62	1,998 74
Total	28,432 40	32,060 31	11,402 21	14,091 60	19,781 42
Percentage of Net Debt to Total Assets	24.5	22.4	63.2	54.8	86.8

"A"—Continued

of Hydro Municipalities as at December 31st, 1920

Ancaster Township	Aylmer 2,177		Ayr 809		Baden P.V.	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	.....	.....	125 00	125 00	660 64	660 64
13,181 18	14,219 47	14,441 06	3,012 35	6,455 72	4,447 42	4,492 15
2,809 16	3,750 91	3,750 91	983 09	1,428 39	1,755 52	1,755 52
4,030 16	4,756 63	5,231 60	1,297 08	1,475 62	1,106 85	1,194 21
455 25	1,124 55	1,124 55	360 27	360 27	370 02	370 02
1,147 70	1,051 86	1,051 86	785 49	785 49	.....	.....
.....	14,719 17	14,719 17	7,027 03	4,006 03	.....	.....
21,623 45	39,622 59	40,319 15	13,590 31	14,636 52	8,340 45	8,472 54
.....	.....	4,493 81	154 89	201 62	2,628 12	3,722 13
.....	.....	.....	1,000 00	1,000 00	.....	.....
417 84	969 34	367 37	1,124 46	1,124 46	.....	.....
.....	513 63	.....	26 10	4 36	23 89	37 73
.....	.....	.....	.....	202 38	988 56	1,458 83
727 48	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	2,268 75	2,645 26
22,768 77	41,105 56	45,180 33	15,895 76	17,169 34	14,249 77	16,336 49
.....	.....	.....	497 90	.....	.....	.....
22,768 77	41,105 56	45,180 33	16,393 66	17,169 34	14,249 77	16,336 49
16,784 97	34,575 71	32,522 32	9,517 47	8,834 33	4,281 36	4,170 17
107 15	.....	.....	.....	.....	.....	.....
1,004 97	198 09	.....	.....	.....	.....	.....
.....	583 68	1,017 18	1,991 28	1,132 89	.....	.....
17,897 09	35,357 48	33,539 50	11,508 75	9,967 22	4,281 36	4,170 17
215 03	4,126 21	6,179 60	2,985 91	3,669 05	718 64	829 83
.....	.....	.....	.....	202 38	988 56	1,458 83
727 48	.....	.....	.....	.....	.....	.....
1,075 00	954 00	1,960 00	1,899 00	2,395 00	1,999 40	2,419 40
2,017 51	5,080 21	8,139 60	4,884 91	6,266 43	3,706 60	4,708 06
2,854 17	667 87	3,501 23	.....	935 69	6,261 81	7,458 26
22,768 77	41,105 56	45,180 33	16,393 66	17,169 34	14,249 77	16,336 49
78.6	86.0	74.2	70.2	58.7	32.2	28.0

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Barton Township		Beachville P.V.		Blenheim 1,533
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings			161 03	161 03	
Sub-Station Equipment					909 64
Distribution System, Overhead	22,386 04	24,032 91	6,696 34	6,852 22	11,654 44
Dist. System, Underground					
Line Transformers	2,156 75	1,399 47	1,714 74	1,714 74	3,339 59
Meters		6,913 95	1,054 59	1,329 97	3,174 28
Street Light Equipment, Regular	1,041 44	708 14	237 03	237 03	825 18
Street Light Equip. Ornamental					1,492 13
Miscellaneous Construction Exp.	239 22	276 22	533 36	533 36	602 17
Steam or Hydraulic Plant					
Old Plant					
Total Plant	25,823 45	33,330 69	10,397 09	10,828 35	21,997 43
Bank and Cash Balance	35,006 93	28,281 44	1,231 90	1,135 05	1,616 72
Securities and Investments			2,500 00	5,000 00	
Accounts Receivable		8,985 51	663 55	104 22	
Inventories			17 00	5 08	105 00
Sinking Fund on Local Debentures					
Equity in Hydro System			906 16	1,454 17	
Equity in Rural Lines					
Other Assets					
H.E.P.C. Operating Account			4,966 45	4,523 02	
Total Assets	60,830 38	70,597 64	20,682 15	23,049 89	23,719 15
Deficit					
Total	60,830 38	70,597 64	20,682 15	23,049 89	23,719 15
LIABILITIES					
Debenture Balance	53,422 66	51,758 55	4,606 32	4,488 04	13,225 33
Accounts Payable	5,556 23	12,511 93			285 59
Bank Overdraft					
Other Liabilities	1,851 49				1,482 97
H.E.P.C. Operating Account					3,230 25
Total Liabilities	60,830 38	64,270 48	4,606 32	4,488 04	18,224 14
RESERVES					
Debentures Paid		255 11	746 68	864 96	774 67
Sinking Fund Reserve					
Reserve for Equity in Hydro Sys.			906 16	1,454 17	
Reserve for Equity in Rural Lines					
Depreciation Reserve		4,450 48	2,693 00	3,197 00	2,832 00
Total Reserves		4,705 59	4,345 84	5,516 13	3,606 67
Surplus		1,621 57	11,729 99	13,045 72	1,888 34
Total	60,830 38	70,597 64	20,682 15	23,049 89	23,719 15
Percentage of Net Debt to Total Assets	100.0	91.3	22.3	20.7	76.8

"A"—Continued

of Hydro Municipalities as at December 31st, 1920

Blenheim	Bolton		Bothwell		Brampton	
	675		700		4,238	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
909 64					3,845 58	3,854 06
12,413 21	8,110 51	9,230 49	3,486 60	3,430 37	8,968 83	8,968 83
					34,907 85	36,128 13
3,339 59	4,627 87	5,771 89	1,310 71	1,310 71	11,632 04	12,698 84
3,869 01	1,767 34	2,290 20	1,319 18	1,346 57	11,935 15	12,725 45
825 18	561 14	561 14	326 10	326 10	1,987 51	2,101 51
1,492 13						
602 17	982 60	982 60	501 90	501 90	19,056 51	18,056 51
	1,554 60	1,554 60				
23,450 93	17,604 06	20,390 92	6,944 49	6,915 65	91,333 47	94,553 33
1,776 52					2,448 85	4,318 09
			2,000 00	2,000 00	10,352 41	8,239 59
	379 42	204 13	1,972 19	1,243 03	4,147 86	246 54
100 00					521 78	553 32
					3,422 45	4,792 85
		174 65	1,207 61	1,838 60		35 43
			1,392 65	1,539 88		
					16,921 43	17,670 17
25,327 45	17,983 48	20,769 70	13,516 94	13,537 16	129,148 25	130,389 32
	2,361 87	1,566 90	1,494 75			
25,327 45	20,345 35	22,336 60	15,011 69	13,537 16	129,148 25	130,389 32
13,001 76	11,533 11	11,254 87	4,723 33	4,643 48	54,937 38	52,650 46
	536 11	811 15	886 69		3,633 63	
	121 30	1,934 97	133 33	139 44		
1,482 97			1,714 73	1,538 08		
1,984 30	4,785 94	3,670 83	3,987 14	1,492 87		
16,469 03	16,976 46	17,671 82	11,445 22	7,813 87	58,571 01	52,650 46
998 24	966 89	1,245 13	810 86	890 71	14,113 26	16,400 18
					3,422 45	4,792 85
		174 65	1,207 61	1,838 60		35 43
3,770 00	2,402 00	3,245 00	1,548 00	2,122 00	22,707 97	26,670 97
4,768 24	3,368 89	4,664 78	3,566 47	4,851 31	40,243 68	47,899 43
4,090 18				871 98	30,333 56	29,839 43
25,327 45	20,345 35	22,336 60	15,011 69	13,537 16	129,148 25	130,389 32
65.0	94.4	85.1	84.6	57.7	45.4	41.9

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Brantford 32,159		Brantford Township		Brigden P.V.
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....	15,434 14	22,051 14			101 03
Sub-Station Equipment.....	48,777 64	48,859 71	810 36	902 33	
Distribution System, Overhead..	124,263 03	142,939 38	34,506 12	29,261 65	3,951 11
Dist. System, Underground.....					
Line Transformers.....	42,561 37	48,879 04	7,583 06	7,268 81	917 96
Meters.....	47,854 45	56,311 33	7,307 09	4,732 27	947 02
Street Light Equipment, Regular..	16,839 98	17,618 64	1,793 69	1,523 49	188 35
Street Light Equip., Ornamental..	32,897 19	34,014 54			
Miscellaneous Construction Exp..	25,195 83	26,438 24	6,217 94	3,341 41	850 83
Steam or Hydraulic Plant.....					
Old Plant.....			3,874 10		2,359 49
Total Plant.....	353,823 63	397,112 02	62,092 36	47,029 96	9,315 79
Bank and Cash Balance.....	420 10	2,286 08	9,045 84	10,558 85	1,552 20
Securities and Investments.....					
Accounts Receivable.....	4,664 92	5,815 38	179 98	1,341 56	316 98
Inventories.....	1,896 87	2,224 36	116 17	108 16	82 83
Sinking Fund on Local Debentures	42,630 77	51,557 00		164 64	
Equity in Hydro System.....		2,781 47			
Equity in Rural Lines.....					
Other Assets.....			3,250 31		
H.E.P.C. Operating Account.....	8,925 96	4,311 51			
Total Assets.....	412,362 25	466,087 82	74,684 66	59,203 17	11,267 80
Deficit.....			481 03	1,458 78	1,396 35
Total.....	412,362 25	466,087 82	75,165 69	60,661 95	12,664 15
LIABILITIES					
Debenture Balance.....	252,500 00	215,000 00	56,308 74	54,660 57	5,486 50
Accounts Payable.....	8,465 24	50,276 07	15,458 13	415 00	3,041 24
Bank Overdraft.....	64 16				
Other Liabilities.....	8,242 95	37,500 00	346 90		1,382 91
H.E.P.C. Operating Account.....					
Total Liabilities.....	269,272 35	302,776 07	72,113 77	55,075 57	9,910 65
RESERVES					
Debentures Paid.....			816 92	1,988 74	2,513 50
Sinking Fund Reserve.....	42,630 77	51,557 00		164 64	
Reserve for Equity in Hydro Sys..		2,781 47			
Reserve for Equity in Rural Lines					
Depreciation Reserve.....	44,754 00	57,544 00	2,235 00	3,433 00	240 00
Total Reserves.....	87,384 77	111,882 47	3,051 92	5,586 38	2,753 50
Surplus.....	55,705 13	51,429 28			
Total.....	412,362 25	466,087 82	75,165 69	60,661 95	12,664 15
Percentage of Net Debt to Total Assets.....	65.3	65.3	96.6	93.0	88.9

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Brigden	Burford		Burgessville		Caledonia	
P.V.	P.V.		P.V.		1,150	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
101 03	202 00	202 00				
5,696 70	3,892 32	4,228 27	2,127 32	2,180 68	6,364 89	6,564 88
1,122 63	1,103 78	1,137 08	567 81	567 81	713 00	713 00
1,220 11	1,167 11	1,403 35	442 38	502 29	1,226 81	1,426 81
223 35	219 40	219 40	122 82	122 82	449 21	605 89
850 83	671 00	671 00	453 00	453 00	173 20	473 20
1,473 18						
10,687 83	7,255 61	7,861 10	3,713 33	3,826 60	9,227 11	9,783 78
24 49	532 48	663 60	327 07	138 61	1,435 87	786 37
185 00	13 10		79 60	79 60		935 87
34 29	2 41	2 41	28 00			1 00
					227 79	338 77
			721 12	42 87 733 67	300 04	411 99
10,931 61	7,803 60	8,527 11	4,869 12	4,821 35	11,190 81	12,257 78
	1,324 89	931 93				
10,931 61	9,128 49	9,459 04	4,869 12	4,821 35	11,190 81	12,257 78
4,933 34	4,164 46	3,971 47	3,083 78	2,963 34	4,148 93	4,036 14
383 97	2 62		305 15	53 79		
384 17		2 62				
1,005 43	3,162 87	3,188 42				
6,706 91	7,329 95	7,162 51	3,388 93	3,023 1	4,148 93	4,036 14
3,066 66	835 54	1,028 53	416 22	536 66	475 07	587 86
					227 79	338 77
591 00	963 00	1,268 00	449 00	619 00	2,085 00	2,179 76
3,657 66	1,798 54	2,296 53	865 22	1,155 66	2,787 86	3,106 39
567 04			614 97	642 56	4,254 02	5,115 25
10,931 61	9,128 49	9,459 04	4,869 12	4,821 35	11,190 81	12,257 78
61.3	93.7	84.0	69.5	62.7	37.1	32.9

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Chatham 15,030		Chippawa 1,095		Clinton 1,948
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	c.	\$ c.
Lands and Buildings	23,408 25	38,519 66			
Sub-Station Equipment	21,546 59	35,971 55			7,738 47
Distribution System Overhead	64,380 09	74,545 75	8,060 62	10,000 92	12,378 26
Dist. System, Underground					
Line Transformers	25,240 58	38,041 01	889 74	1,357 92	3,389 78
Meters	21,328 79	41,773 47	345 81	962 80	3,770 71
Street Light Equipment, Regular	7,809 38	7,810 38	491 78	509 78	665 00
Street Light Equip. Ornamental	26,907 19	26,907 19			
Miscellaneous Construction Exp.	19,012 81	22,288 73	410 33	515 76	3,310 45
Steam or Hydraulic Plant					
Old Plant		22,940 00			10,785 11
Total Plant	209,633 68	308,797 74	10,198 28	13,347 18	42,037 78
Bank and Cash Balance	25 00	50 00	270 85		3,226 01
Securities and Investments					
Accounts Receivable	25,504 23	21,664 82	288 00	39 63	14 58
Inventories	19,049 85	55,249 77			1,875 47
Sinking Fund on Local Debentures					5,474 76
Equity in Hydro System					
Equity in Rural Lines		83 94			
Other Assets		6,387 11			
H.E.P.C. Operating Account	1,670 51	10,710 78		690 76	
Total Assets	255,883 27	402,944 16	10,757 13	14,077 57	52,628 60
Deficit	3,062 94				
Total	258,946 21	402,944 16	10,757 13	14,077 57	52,628 60
LIABILITIES					
Debenture Balance	210,424 64	301,701 50	6,500 00	10,191 44	40,500 00
Accounts Payable	11,025 37	17,477 73	4,096 60	2,626 90	
Bank Overdraft	5,421 14	23,004 52		399 80	
Other Liabilities	1,384 51				
H.E.P.C. Operating Account					1,096 00
Total Liabilities	228,255 66	342,183 75	10,596 60	13,218 14	41,596 00
RESERVES					
Debentures Paid	11,482 55	13,274 40		158 56	
Sinking Fund Reserve					5,474 76
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines		83 94			
Depreciation Reserve	19,208 00	26,890 00		309 76	5,270 00
Total Reserves	30,690 55	40,248 34		468 32	10,744 76
Surplus		20,512 07	160 53	391 11	287 84
Total	258,946 21	402,944 16	10,757 13	14,077 57	52,628 60
Percentage of Net Debt to Total Assets	89.2	84.9	98.5	93.8	79.0

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Clinton 1,948	Comber P.V.		Dashwood P.V.		Dereham Township	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ *c.	\$ c.
7,738 47						
13,544 15	3,706 55	4,353 62	1,752 53	1,828 02	8,816 09	8,974 86
3,503 27	420 25	2,440 29	953 68	953 68	11,317 74	11,317 74
4,222 71	818 64	1,013 80	884 50	884 50	2,885 64	3,012 84
826 98	199 55	199 55	139 19	189 00		
3,310 45	929 11	957 54	291 87	291 87	483 26	483 26
10,785 11						
43,931 14	6,074 10	8,964 80	4,021 77	4,147 07	23,502 73	23,788 70
1,959 69		183 57	287 49	266 31	77 79	2,684 40
	508 02	332 22	5 24	5 24	2,321 86	90 13
3,124 50	20					
6,447 25						
607 48					945 77	1,509 96
			247 06	418 34		
56,070 06	6,582 32	9,480 59	4,561 56	4,836 96	26,848 15	28,073 19
	4,180 84	3,208 09				2,020 51
56,070 06	10,763 16	12,688 68	4,561 56	4,836 96	26,848 15	30,093 70
40,500 00	4,115 46	6,535 42	3,251 64	3,196 51	20,001 12	20,703 38
	416 58			202 49	5,464 09	5,452 75
	71 24					
376 92	4,466 34	3,937 68		461 00	224 84	315 61
40,876 92	9,069 62	10,473 10	3,251 64	3,196 51	25,690 05	26,471 74
	934 54	1,164 58	148 36	203 49		
6,447 25						
607 48					945 77	1,509 96
6,626 00	759 00	1,051 00	297 00	461 00		2,112 00
13,680 73	1,693 54	2,215 58	445 36	664 49	945 77	3,621 96
1,512 41			864 56	975 96	212 33	
56,070 06	10,763 16	12,688 68	4,561 56	4,836 96	26,848 15	30,093 70
73.7	137.7	110.4	71.3	66.1	95.7	94.2

STATEMENT

Comparative Balance Sheets of Electric Departments

NIAGARA

SYSTEM- Continued

Municipality Population	Delaware P.V.		Dorchester P.V.		Drayton 622
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....					
Sub-Station Equipment.....					
Distribution System, Overhead..	2,155 85	2,155 85	3,008 66	3,027 41	5,521 61
Dist. System, Underground.....					
Line Transformers.....	216 75	216 75	1,519 89	1,519 89	1,172 42
Meters.....	415 30	433 90	981 33	1,159 13	1,708 23
Street Light Equipment, Regular.	106 93	106 93	212 34	212 34	567 13
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp..	203 81	203 81	328 41	328 41	388 37
Steam or Hydraulic Plant.....					
Old Plant.....					
Total Plant.....	3,098 64	3,117 24	6,050 63	6,247 18	9,357 76
Bank and Cash Balance.....	241 36	491 86	30 94	18 86	1,086 95
Securities and Investments.....					
Accounts Receivable.....	1,148 90	1,254 33	86 34	579 34	170 69
Inventories.....					115 00
Sinking Fund on Local Debentures					
Equity in Hydro System.....				67 33	
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....			652 49	865 20	
Total Assets.....	4,448 90	4,863 43	6,820 40	7,777 91	10,730 40
Deficit.....	406 43	66 90			
Total.....	4,895 33	4,930 33	6,820 40	7,777 91	10,730 40
LIABILITIES					
Debenture Balance.....	3,667 29	3,590 42	4,021 38	3,942 38	9,252 47
Accounts Payable.....		76 50			
Bank Overdraft.....					
Other Liabilities.....			1 00	1 00	
H.E.P.C. Operating Account.....	436 33	260 83			208 87
Total Liabiltiies.....	4,103 62	3,927 75	4,022 05	3,943 38	9,461 34
RESERVES					
Debentures Paid.....	332 71	409 58	278 95	357 62	247 53
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys.				67 33	
Reserve for Equity in Rural Lines					
Depreciation Reserve.....	459 00	593 00	991 00	1,264 00	612 00
Total Reserves.....	791 71	1,002 58	1,269 95	1,688 95	859 53
Surplus.....			1,528 40	2,145 58	409 53
Total.....	4,895 33	4,930 33	6,820 40	7,777 91	10,730 40
Percentage of Net Debt to Total Assets.....	83.4	80.7	58.9	51.1	88.2

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Drayton 622	Dresden 1,413		Drumbo P.V.		Dublin P.V.	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	523 00	523 00	.....	.....	85 00	85 00
5,639 12	6,601 28	6,671 68	2,726 27	2,775 10	3,735 08	3,956 91
1,480 35	2,907 40	3,887 44	457 46	457 46	660 75	660 75
1,772 23	3,375 14	3,921 50	818 00	818 00	358 10	520 46
567 13	774 82	774 82	129 89	129 89	417 71	417 71
388 37	408 09	408 09	235 58	235 58	705 56	751 91
.....	5,602 91	5,578 76	.....	.....	.....	.....
9,847 20	20,192 64	21,765 29	4,367 20	4,416 03	5,962 20	6,392 74
1,609 50	572 34	635 87	286 24	160 98	18 01	516 46
.....	.....	20 22	600 00	600 00	141 61	.....
43 95	1,354 94	1,553 82	20 25	.....	85 22	40 20
.....	.....	.....	.....	122 56	.....	.....
.....	.....	732 50	.....	.....	.....	.....
11,500 65	22,119 92	24,707 70	5,273 69	5,299 57	6,207 04	6,949 40
.....	.....	.....	857 05	429 11	750 36	358 44
11,500 65	22,119 92	24,707 70	6,130 74	5,728 68	6,957 40	7,307 84
9,117 46	13,339 42	12,611 49	4,125 73	4,039 28	4,545 72	4,377 34
.....	2,000 48	.....	40 95	20 00	1,120 52	1,180 79
129 89	636 33	.....	953 79	259 12	395 88	443 05
9,247 35	15,976 23	12,611 49	5,120 47	4,318 40	6,062 12	6,001 18
382 54	2,898 83	3,626 76	374 27	460 72	454 28	622 66
.....	.....	.....	.....	122 56	.....	.....
1,005 00	2,125 00	2,808 00	636 00	827 00	441 00	684 00
1,387 54	5,023 83	6,434 76	1,010 27	1,410 28	895 28	1,306 66
865 76	1,119 86	5,661 45	.....	.....	.....	.....
11,500 65	22,119 92	24,707 70	6,130 74	5,728 68	6,957 40	7,307 84
80.4	72.2	51.0	97.1	83.4	97.7	86.3

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Dundas 6,099		Dunnville 3,042		Dutton 858
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings	8,371 15	8,474 72	3,379 78	3,379 78	.....
Sub-Station Equipment.....	5,595 23	5,748 62	16,916 68	16,916 68	.....
Distribution System, Overhead..	42,487 28	44,618 51	23,357 63	24,618 14	6,044 52
Dist. System, Underground.....	.....	.....	.....	.....	.....
Line Transformers.....	11,282 63	12,084 36	5,356 99	7,277 73	1,870 48
Meters.....	12,284 98	1,4245 84	4,145 66	4,819 17	2,265 99
Street Light Equipment, Regular.	1,689 02	1,689 02	2,320 25	2,320 25	441 01
Street Light Equip., Ornamental.	.....	.....	4,767 47	4,767 47	.....
Miscellaneous Construction Exp..	7,135 61	6,669 34	4,632 57	4,775 12	288 17
Steam or Hudraulic Plant.....	.....	.....	.....	.....	.....
Old Plant.....	1,867 38	1,867 38	10,890 13	10,742 62	.....
Total Plant.....	90,713 28	95,397 79	75,767 16	79,616 96	10,910 17
Bank and Cash Balance.....	.....	1,461 63	.....	.....	590 60
Securities and Investments.....	.....	.....	.....	.....	2,000 00
Accounts Receivable.....	.....	1,090 57	1,918 23	1,978 37	.....
Inventories.....	2,003 48	2,699 64	424 89	714 11	125 32
Sinking Fund on Local Debentures	.....	.....	.....	.....	.....
Equity in Hydro System.....	3,155 87	4,051 02	.....	.....	.....
Equity in Rural Lines.....	.....	.....	.....	.....	.....
Other Assets.....	.....	.....	.....	.....	.....
H.E.P.C. Operating Account.....	.....	.....	.....	.....	.....
Total Assets.....	95,872 63	104,700 65	78,110 28	82,309 44	13,626 09
Deficit.....	.....	.....	.....	.....	.....
Total.....	95,872 63	104,700 65	78,110 28	82,309 44	13,626 09
LIABILITIES					
Debenture Balance.....	47,156 81	46,092 37	50,865 71	62,409 16	8,114 70
Accounts Payable.....	1,807 07	1,531 08	10,490 13	2,167 50	.....
Bank Overdraft.....	1,014 27	.....	5,035 57	1,729 41	.....
Other Liabilities.....	.....	.....	.....	.....	9 90
H.E.P.C. Operating Account.....	1,055 87	3,691 73	6,788 99	6,932 61	74 66
Total Liabilities.....	51,034 02	51,315 18	73,180 40	73,238 68	8,199 26
RESERVES					
Debentures Paid.....	5,843 19	6,907 63	2,134 29	3,090 84	292 79
Sinking Fund Reserve.....	.....	.....	.....	.....	.....
Reserve for Equity in Hydro Sys..	3,155 87	4,051 02	.....	.....	.....
Reserve for Equity in Rural Lines	.....	.....	.....	.....	.....
Depreciation Reserve.....	20,325 60	24,410 70	2,275 00	4,550 00	1,496 00
Total Reserves.....	29,324 66	35,369 35	4,409 29	7,640 84	1,788 79
Surplus.....	15,513 95	18,016 12	520 59	1,429 92	3,638 04
Total.....	95,872 63	104,700 65	78,110 28	82,309 44	13,626 09
Percentage of Net Debt to Total Assets.....	51.3	50.9	93.7	88.9	60.2

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Dutton 858	Elmira 2,392		Elora 1,122		Embro 481	
1920	1919	1920	1919	1920	1929	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	3,000 00	4,013 41	.....	.....	.....	.....
6,138 21	12,532 51	14,148 87	9,697 67	10,660 98	5,686 15	5,712 89
1,856 15	4,886 49	5,113 68	4,458 03	4,596 11	1,236 92	1,236 92
2,383 58	4,096 72	5,009 48	2,211 48	2,629 24	988 88	989 78
441 01	657 49	673 53	501 34	501 34	209 29	209 29
288 17	2,076 74	2,076 74	926 18	926 18	69 45	69 45
.....	2,295 52	2,295 52	1,425 47	1,425 47	429 25	429 25
11,107 12	29,545 47	33,331 23	19,220 17	20,739 32	8,619 94	8,647 58
1,469 22	2,343 16	246 96	1,438 82	334 64	220 15	298 23
2,000 00	.....	.....	.....	.....	1,000 00	1,000 00
200 20	97 30	2,154 84	1,023 94	1,335 52	.....	.....
.....	607 20	1,207 67	.....	600 52	.....	349 04
.....	.....	.....	75 72	92 75	.....	.....
477 82	355 80	1,301 24	.....	972 71	.....	.....
15,254 36	32,948 93	38,241 94	21,758 65	24,075 46	9,840 09	10,294 85
.....	.....	.....	.....	.....	3,041 71	2,784 53
15,254 36	32,948 93	38,241 94	21,758 65	24,075 46	12,881 80	13,079 38
7,955 01	18,235 39	17,876 54	11,302 27	10,920 46	7,500 00	7,296 11
.....	.....	600 00	.....	.....	.....	72 00
10 00	.....	.....	1,055 42	.....	3,815 80	3,205 34
7,965 01	18,235 39	18,476 54	12,357 69	10,920 46	11,315 80	10,573 45
452 48	1,764 61	2,123 46	1,697 73	2,079 54	.....	203 89
.....	607 20	1,207 67	.....	600 52	.....	349 04
.....	.....	.....	75 72	92 75	.....	.....
1,985 00	4,806 00	6,054 00	2,987 00	3,857 00	1,566 00	1,953 00
2,437 48	7,177 81	9,385 13	4,760 45	6,629 81	1,566 00	2,505 93
4,851 87	7,535 73	10,380 27	4,640 51	6,525 19	.....	.....
15,254 36	32,948 93	38,241 94	21,758 65	24,075 46	12,881 80	13,079 38
52.2	55.4	49.8	56.8	46.5	115.0	106.3

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Etobicoke Township		Exeter 1,431		Fergus 1,609
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....					
Sub-Station Equipment.....					
Distribution System, Overhead..	6,445 65	11,724 32	12,498 72	12,722 45	11,758 62
Dist. System, Underground.....					
Line Transformers.....	1,395 28	2,260 45	2,934 64	3,416 71	3,919 50
Meters.....	3,686 94	7,000 02	2,817 90	3,639 27	3,749 27
Street Light Equipment, Regular.	254 69	419 16	732 08	732 08	913 07
Street Light, Equip., Ornamental.					
Miscellaneous Construction Exp..	1,315 42	1,540 42	1,549 48	1,549 48	562 37
Steam or Hydraulic Plant.....					
Old Plant.....	34,444 23	34,444 23			2,546 59
Total Plant.....	47,542 21	57,388 60	20,532 82	22,059 99	23,449 42
Bank and Cash Balance.....	242 78		4,513 19	1,784 35	21 60
Securities and Investments.....	8,000 00	8,000 00	3,000 00	3,000 00	
Accounts Receivable.....					201 58
Inventories.....	48 71	214 44	1,747 00	3,309 93	2,429 96
Sinking Fund on Local Debentures					
Equity in Hydro System.....					
Equity in Rural Lines.....	3,562 88	4,450 09			
Other Assets.....					
H.E.P.C. Operating Account.....	2,083 36	3,884 53		382 42	
Total Assets.....	61,479 94	73,937 66	29,793 01	30,536 69	26,102 56
Deficit.....					
Total.....	61,479 94	73,937 66	29,793 01	30,536 69	26,102 56
LIABILITIES					
Debenture Balance.....	43,984 00	42,612 55	18,197 89	17,684 53	14,767 20
Accounts Payable.....	700 28	337 99			127 50
Bank Overdraft.....		1,974 18			
Other Liabilities.....					
H.E.P.C. Operating Account.....			2,903 84		1,633 80
Total Liabilities.....	44,684 28	44,924 72	21,101 73	17,684 53	16,528 50
RESERVES					
Debentures Paid.....	2,016 00	3,115 60	1,802 16	2,315 52	1,232 80
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys..					
Reserve for Equity in Rural Lines	3,562 88	4,450 09			
Depreciation Reserve.....	9,136 82	13,774 82	2,226 00	3,105 00	3,515 00
Total Reserves.....	14,715 70	21,340 51	4,028 16	5,420 52	4,747 80
Surplus.....	2,079 96	7,672 43	4,663 12	7,431 64	4,826 26
Total.....	61,479 94	73,937 66	29,793 01	30,536 69	26,102 56
Percentage of Net Debt ot Total Assets.....	72.7	60.7	70.8	57.9	63.3

"A"—Continued

of Hydro Municipalities as at December 31st, 1920

Fergus 1,609	Forest 1,422		Galt 12,434		Georgetown 2,010	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	4,500 00	4,500 00	21,952 03	23,677 96	12 00	12 00
.....	.....	.....	48,467 65	50,745 05	.....	.....
15,321 29	4,169 01	11,315 91	135,228 68	139,560 62	17,766 24	19,051 20
.....
5,602 98	2,425 75	2,761 27	23,656 71	26,223 50	6,471 35	7,456 81
5,011 28	4,896 67	5,330 89	38,071 75	40,339 95	5,725 92	6,524 81
1,201 02	1,609 88	1,674 28	8,990 75	8,990 75	985 39	985 39
.....	.....	.....	53,432 88	56,882 32	.....	.....
615 37	102 30	102 30	13,264 78	13,834 73	1,397 65	1,397 65
.....
2,546 59	17,687 49	11,084 87	.....	.....	2,209 80	2,209 80
.....
30,298 53	35,391 10	36,769 52	343,065 23	360,254 79	34,568 35	37,647 66
.....	1,206 89	1,322 68	.....	25 00	5,409 89	1,546 52
.....	.....	.....	.....	.....	6,000 00	14,169 90
71 00	804 95	128 56	1,923 32	1,623 32	474 08	133 49
3,249 82	4,053 68	4,377 85	4,634 76	5,183 15	1,576 05	1,757 77
.....	.....	.....	49,160 68	57,555 79	.....	.....
540 12	.....	.....	10,852 89	14,922 39	1,294 97	2,643 67
.....	.....	.....	.....	.....	853 26	1,047 39
.....	.....	.....	1,435 00	1,394 70	.....	.....
.....	.....	625 23	28,200 74	27,552 72	1,929 61	3,531 99
.....
34,159 47	41,456 62	43,223 84	439,272 62	468,511 86	52,106 21	62,478 39
.....
34,159 47	41,456 62	43,223 84	439,272 62	468,511 86	52,106 21	62,478 39
.....
14,478 51	28,268 14	26,975 24	184,477 49	188,579 18	18,235 36	17,876 51
.....	2,418 51	834 11	3,000 00	3,050 00	.....	.....
7,173 29	.....	.....	47,591 77	33,052 56	.....	.....
.....
1,655 10	361 01	.....	.....	.....	.....	.....
.....
23,306 90	31,047 66	27,809 35	235,069 26	224,681 74	18,235 36	17,876 51
.....
1,521 49	6,131 86	7,424 76	.....	.....	1,764 64	2,123 49
.....	.....	.....	49,160 68	57,555 79	.....	.....
540 12	.....	.....	10,852 89	14,922 39	1,294 97	2,643 67
.....	.....	.....	.....	.....	853 26	1,047 39
4,605 00	2,004 00	3,037 00	57,061 92	66,962 65	8,615 00	10,646 00
.....
6,666 61	8,135 86	10,461 76	117,075 49	139,440 83	12,527 87	16,460 55
4,185 96	2,273 10	4,952 73	87,127 87	104,389 29	21,342 98	28,141 33
.....
34,159 47	41,456 62	43,223 84	439,272 62	468,511 86	52,106 21	62,478 39
.....
69.3	74.9	64.3	53.5	49.5	35.0	29.8

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Glencoe	Goderich 4,562		Granton P.V.	
	1920	1919	1920	1919	1920
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....		12,915 81	12,915 81		
Sub-Station Equipment.....		9,975 07	9,989 28		
Distribution System, Overhead..	13,652 05	32,946 89	35,589 05	2,917 74	3,025 36
Dist. System, Underground.....					
Line Transformers.....	2,662 85	9,228 22	9,900 99	623 16	623 16
Meters.....	2,030 39	8,343 29	9,573 44	754 57	826 74
Street Light Equipment, Regular	1,630 56	4,170 27	4,170 27	149 27	149 27
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp..	3,179 01	4,005 81	4,005 81	110 28	110 28
Steam or Hydraulic Plant.....					
Old Plant.....		14,622 15	14,622 15		
Total Plant.....	23,154 86	96,207 51	100,766 80	4,555 02	4,734 81
Bank and Cash Balance.....	506 04	8,458 30	3,901 66	74 97	645 24
Securities and Investments.....					
Accounts Receivable.....		1,792 52	4,684 47		80 00
Inventories.....		463 27	340 36		
Sinking Fund on Local Debentures		3,806 51	4,228 20		
Equity in Hydro System.....			1,894 95		
Equity in Rural Lines.....		245 18	296 63		
Other Assets.....					
H.E.P.C. Operating Account.....	200 32				
Total Assets.....	23,861 22	110,973 29	116,113 07	4,629 99	5,460 05
Deficit.....					
Total.....	23,861 22	110,973 29	116,113 07	4,629 99	5,460 05
LIABILITIES					
Debenture Balance.....	19,980 82	45,672 70	43,644 30	3,306 33	3,250 44
Accounts Payable.....	2,179 53	1,411 96	1,758 02	250 00	552 92
Bank Overdraft.....					
Other Liabilities.....					
H.E.P.C. Operating Account.....		10,336 47	8,467 28	347 69	139 23
Total Liabilities.....	22,160 35	57,421 13	53,869 60	3,904 02	3,942 59
RESERVES					
Debentures Paid.....	132 06	10,415 35	12,443 75	193 67	249 56
Sinking Fund Reserve.....		3,806 51	4,228 20		
Reserve for Equity in Hydro Sys..			1,894 95		
Reserve for Equity in Rural Lines		245 18	296 63		
Depreciation Reserve.....		17,204 00	21,160 00	530 00	732 00
Total Reserves.....	132 06	31,671 04	40,023 53	723 67	981 56
Surplus.....	1,568 81	21,881 12	22,219 94	2 30	535 90
Total.....	23,861 22	110,973 29	116,113 07	4,629 99	5,460 05
Percentage of Net Debt to Total Assets.....	92.8	51.7	47.1	84.3	72.2

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Grantham Township		Guelph 17,032		Hagersville 1,058		Hamilton 108,143	
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
		13,453 14	12,004 40			95,341 39	93,842 46
		68,151 77	71,377 40			101,273 83	101,431 55
6,441 19	7,008 86	76,021 21	83,869 45	8,116 40	8,685 69	422,961 00	462,336 84
						160,226 08	164,185 07
3,026 05	3,295 44	16,951 36	25,882 14	1,604 17	2,244 61	166,426 03	198,609 11
1,485 73	1,724 08	39,203 10	41,343 73	2,931 90	3,264 71	215,172 26	225,195 39
		26,033 21	26,126 46	435 35	608 30	94,661 10	95,837 76
267 30	267 30	11,081 34	10,974 26	140 20	140 20	142,508 83	143,571 41
		14,165 57					
11,220 27	12,295 68	265,060 70	271,577 84	13,228 02	14,943 51	1,398,570 52	1,485,009 59
29 82	329 55	37 50	37 50	2,032 61	1,736 78		
		30,000 00	25,000 00	4,500 00	4,500 00		
1,640 07	1,838 28	9,115 76	12,857 39		496 63	129,226 05	141,845 81
		25,274 30	32,179 70	92 92	106 13	147,559 83	60,330 35
1,116 48	1,520 88	27,875 50	31,180 06			147,559 83	176,935 55
		9,711 91	13,513 34	498 80	1,050 85	26,116 95	38,422 27
2,318 09	2,942 64						
						3,420 79	4,624 13
		26,066 37	24,434 33		517 51	619 02	
16,324 73	18,927 03	393,142 04	410,780 16	20,352 35	23,351 41	1,760,322 02	907,167 80
2,148 18	1,925 92						
18,472 91	20,852 95	393,142 04	410,780 16	20,352 35	23,351 41	1,760,322 02	907,167 80
11,000 00	10,899 62	116,138 77	113,569 63	7,051 50	6,853 28	1,008,840 08	1,002,838 34
2,870 34	3,833 11	11,160 06	10,677 84			71,566 17	89,786 46
		432 79	6,284 45			92,293 68	81,173 57
						27,423 68	30,258 64
	2 72			1,360 50			24,412 85
13,870 34	14,735 45	127,731 62	130,531 92	8,412 00	6,853 28	1,200,124 01	1,228,470 36
1,116 48	100 38	28,861 22	31,430 36	948 50	1,146 72	11,159 52	17,161 16
	1,520 88	27,875 50	31,180 06			147,559 83	176,935 55
		9,711 91	13,513 34	498 80	1,050 85	26,116 95	38,442 27
2,318 09	2,942 64						303,187 67
1,168 00	1,553 60	61,157 10	61,515 23	2,532 00	2,606 46	249,040 60	303,187 67
4,602 57	6,117 50	127,805 73	137,638 99	3,979 30	4,804 03	433,876 90	535,706 65
		137,604 69	142,609 25	7,961 05	11,694 10	126,321 11	142,990 79
18,472 91	20,852 95	393,142 04	410,780 16	20,352 35	23,351 41	1,760,322 02	1,907,167 80
84.9	77.8	33.2	32.8	41.3	30.7	68.2	65.7

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Harriston 1,381		Hensall 715		Hespeler 3,000
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.....					3,499 23
Sub-Station Equipment.....	600 00	600 00			8,505 67
Distribution System Overhead....	8,320 42	8,806 06	6,680 81	6,692 81	8,644 89
Dist. System, Underground.....					
Line Transformers.....	3,550 38	3,762 20	2,250 85	2,250 85	6,069 83
Meters.....	3,040 05	3,456 55	1,770 01	1,839 39	6,059 45
Street Light Equipment, Regular.	350 00	350 00	426 35	436 67	1,126 94
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp.	458 07	458 07	447 50	447 50	93 08
Steam or Hydraulic Plant.....					
Old Plant.....	1,130 83	1,130 83	400 00	400 00	3,000 00
Total Plant.....	17,449 75	18,563 71	11,975 52	12,067 22	36,999 09
Bank and Cash Balance.....			1,599 70	736 26	1,707 70
Securities and Investments.....					2,056 50
Accounts Receivable.....	1,429 85	2,385 96	390 70	393 00	2,300 23
Inventories.....	2,776 18	3,104 86	246 73	244 03	198 26
Sinking Fund on Local Debentures					
Equity in Hydro System.....					1,700 15
Equity in Rural Lines.....					
Other Assets.....			384 47		
H.E.P.C. Operating Account.....					5,319 74
Total Assets.....	21,655 78	24,054 53	14,597 12	13,440 51	50,281 67
Deficit.....	1,497 21	986 67	265 95	479 35	
Total.....	23,152 99	25,041 20	14,863 07	13,919 86	50,281 67
LIABILITIES					
Debenture Balance.....	11,286 48	10,711 78	11,562 22	11,345 42	18,962 47
Accounts Payable.....	1,773 64	3,158 51		89 10	
Bank Overdraft.....	1,956 94	2,713 97			
Other Liabilities.....					
H.E.P.C. Operating Account.....	4,426 38	3,448 69	1,589 07	58 76	
Total Liabilities.....	19,443 44	20,032 95	13,151 29	11,493 28	18,962 47
RESERVES					
Debentures Paid.....	2,031 55	2,606 25	437 78	654 58	13,608 04
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys.					1,700 15
Reserve for Equity in Rural Lines					
Depreciation Reserve.....	1,678 00	2,402 00	1,274 00	1,772 00	9,196 56
Total Reserves.....	3,709 55	5,008 25	1,711 78	2,426 58	24,504 75
Surplus.....					6,814 45
Total.....	23,152 99	25,041 20	14,863 07	13,919 86	50,281 67
Percentage of Net Debt to Total Assets.....	89.9	83.2	88.5	85.5	37.7

“A”—Continued
of Hydro Municipalities as at December 31st. 1920

Hespeler	Highgate		Ingersoll		Kitchener	
3,000	379		5,278		21,056	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
3,499 23			3,057 57	3,057 57	31,523 79	40,401 32
8,507 47			10,302 31	10,302 31	89,548 86	94,199 39
10,658 18	3,529 65	3,618 95	34,610 13	36,614 20	110,038 12	118,809 48
					6,871 55	9,444 68
6,772 56	1,488 37	1,488 37	9,779 70	10,602 77	62,555 98	66,184 87
6,845 31	947 73	1,070 03	13,814 34	16,104 36	63,837 88	71,021 32
1,452 01	282 15	282 15	2,423 00	2,573 22	20,837 87	22,293 45
			4,597 59	4,597 59		
93 08	453 85	453 85	9,049 55	8,839 55	7,184 84	7,097 29
3,000 00			20,675 71	20,607 25	52,536 31	52,536 31
40,827 84	6,701 75	6,913 35	108,309 90	113,298 82	444,935 20	482,988 11
	1,048 66	526 80	496 74		12,717 10	1,592 29
1,586 40			19,100 00	20,500 00	10,000 00	9,728 16
2,651 61		53 33	9,288 19	5,306 08	12,358 91	28,061 18
	26 86	47 80	769 88	6,058 60	10,672 57	14,585 95
			17,253 73	20,191 65		
2,380 49			4,426 43	6,205 72	17,649 77	25,305 07
4,977 75			12,252 82	11,717 15	27,942 60	25,036 30
52,424 09	7,777 27	7,541 28	171,897 69	183,278 02	536,276 15	587,297 06
52,424 09	7,777 27	7,541 28	171,897 69	183,278 02	536,276 15	587,297 06
16,795 15	4,762 74	4,675 63	79,800 00	79,800 00	211,832 13	202,977 53
	1,020 27	499 79	2,208 10	1,973 68	13,852 55	16,362 54
383 78				651 79		
			4,597 59	4,597 59		
	594 87	27 76				
17,178 93	6,377 88	5,203 18	86,605 69	87,023 06	225,684 68	219,340 07
15,775 36	237 26	324 37			88,317 87	97,172 47
			17,253 73	20,191 65		
2,380 49			4,426 43	6,205 72	17,649 77	25,305 07
10,996 56	493 00	767 00	18,780 77	21,204 04	88,827 00	106,184 00
29,152 41	730 26	1,091 37	40,460 93	47,601 41	194,794 64	228,661 54
6,092 75	669 13	1,246 73	44,831 07	48,653 55	115,796 83	139,295 45
52,424 09	7,777 27	7,541 28	171,897 69	183,278 02	536,276 15	587,297 06
34.3	83.4	68.9	50.4	49.1	42.8	39.0

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality opulation	Lambeth P.V.		Listowel 2,437		London 59,100
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....			1,229 07	1,229.07	231,127 39
Sub-Station Equipment.....					249,284 24
Distribution System, Overhead... 2,792 33	2,839 38	17,775 74	23,351 60	423,827 46	10,993 07
Dist. System, Underground.....	288 86	288 86	9,027 39	10,740 59	63,297 75
Line Transformers.....	1,121 67	1,129 02	6,282 46	7,646 40	159,522 19
Meters.....	159 37	159 37	1,238 10	1,238 10	30,638 70
Street Light Equipment, Regular.			5,780 22	5,780 22	11,428 08
Street Light Equip., Ornamental.	214 73	214 73	1,275 77	1,314 01	67,472 63
Miscellaneous Construction Exp..					
Steam or Hydraulic Plant.....			4,959 40	4,750 70	
Old Plant.....					
Total Plant.....	4,576 96	4,631 36	47,568 15	56,050 69	1,247,591 51
Bank and Cash Balance.....	1,177 83	1,317 92	1,001 59	862 92	3,924 21
Securities and Investments.....					
Accounts Receivable.....	114 69	74 64	6,290 33	2,541 21	179,246 39
Inventories.....			2,399 20	1,217 51	58,086 80
Sinking Fund on Local Debentures					81,503 48
Equity in Hydro System.....					36,759 15
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....			778 15	1,223 38	106,334 71
Total Assets.....	5,869 48	6,023 92	58,037 42	61,895 71	1,713,446 25
Deficit.....					
Total.....	5,869 48	6,023 92	58,037 42	61,895 71	1,713,446 25
LIABILITIES.....					
Debenture Balance.....	3,767 20	3,714 79	28,560 47	26,918 40	713,583 59
Accounts Payable.....			11,358 62	12,799 29	168,622 20
Bank Overdraft.....					54,890 17
Other Liabilities.....			3,808 37	5,742 30	2,219 50
H.E.P.C. Operating Account.....	873 90	465 53			
Total Liabilities.....	4,641 10	4,180 32	43,727 46	45,459 99	935,315 46
RESERVES					
Debentures Paid.....	232 80	285 21	5,629 42	7,271 49	53,316 41
Sinking Fund Reserve.....					81,503 48
Reserve for Equity in Hydro Sys..					36,759 15
Reserve for Equity in Rural Lines	743 00	947 00	3,772 00	5,472 00	239,735 87
Depreciation Reserve.....					
Total Reserves.....	975 80	1,232 21	9,401 42	12,743 49	411,314 91
Surplus.....	252 58	611 39	4,908 54	3,692 23	362,815 88
Total.....	5,869 48	6,023 92	58,037 42	61,895 71	1,713,446 25
Percentage of Net Debt to Total Assets.....	79.1	69.3	75.3	73.4	54.9

“A”—Continued
of Hydro Municipalities as at December 31st. 1920

London 59,100	London Township		Louth Township		Lucan 640	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
233,862 76						
263,548 17						
447,189 28	2,774 70	2,934 70	824 14	1,377 71	6,302 51	7,082 38
11,003 39						
70,672 79	1,114 40	1,114 40	1,165 20	1,673 70	2,380 20	3,507 90
182,957 14	1,066 80	1,066 80	339 79	578 76	2,138 77	2,329 60
30,927 41					372 54	372 54
11,428 08						
72,362 43	431 64	451 74			395 99	394 47
	1,733 80	1,733 80			2,860 45	2,860 45
1,323,951 45	7,121 34	7,301 44	2,329 13	3,630 17	14,450 46	16,547 34
8,832 13	381 79	212 06	19 28	541 16	1,742 97	326 30
225,478 07			53 53			
58,559 74					141 28	26 05
101,390 11						
51,634 79						
			69 69	164 59		6 00
100,090 57					2,601 88	4,482 83
1,869,936 86	7,503 13	7,513 50	2,471 63	4,335 92	18,936 59	21,388 52
1,869,936 86	7,503 13	7,513 50	2,471 63	4,335 92	18,936 59	21,388 52
812,332 34	7,500 00	7,296 12	1,950 00	1,902 44	9,824 09	9,491 95
103,409 36	3 13	13 50		1,869 62	330 58	1,022 41
56,692 70						
14,968 90			126 84	126 84		
987,403 30	7,503 13	7,309 62	2,076 84	3,898 90	10,154 67	10,514 36
59,567 66		203 88		47 56	1,389 53	1,721 67
101,390 11						
51,634 79						
			69 69	164 59		6 00
283,064 22			100 48	173 00	1,987 00	2,138 63
495,656 78		203 88	170 17	385 15	3,376 53	3,866 30
386,876 78			224 62	51 87	5,405 39	7,007 86
1,869,936 86	7,503 13	7,513 50	2,471 63	4,335 92	18,936 59	21,388 52
54.3	100.0	97.3	84.4	89.9	53.6	49.1

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Lynden P.V.		Markham	Milton 1,750	
	1919	1920	1920	1919	1920
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings	241 18	241 18			
Sub-Station Equipment				5,550 19	5,550 19
Distribution System, Overhead	2,679 61	2,679 72	7,885 78	11,477 77	12,026 50
Dist. System, Underground					
Line Transformers	942 37	942 37	2,897 99	4,359 67	5,393 08
Meters	608 10	674 92	2,077 85	4,535 38	4,979 55
Street Light Equipment, Regular	137 90	163 30	281 78	959 87	959 87
Street Light Equip., Ornamental					
Miscellaneous Construction Exp.	193 57	193 57	830 10	2,486 23	2,526 23
Steam or Hydraulic Plant					
Old Plant			200 13	4,065 85	4,065 85
Total Plant	4,802 73	4,895 06	14,173 63	33,434 96	35,501 27
Bank and Cash Balance	1,106 49	184 22		5,166 72	3,780 39
Securities and Investments	1,000 00	1,000 00		2,000 00	2,000 00
Accounts Receivable			544 76	1,027 61	2,125 06
Inventories				2,881 93	5,353 53
Sinking Fund on Local Debentures					
Equity in Hydro System				943 97	1,895 63
Equity in Rural Lines					97 88
Other Assets					
H.E.P.C. Operating Account			191 47		2,047 71
Total Assets	6,909 22	6,079 28	14,909 86	45,455 19	52,801 47
Deficit	1,466 30	794 34			
Total	8,375 52	6,873 62	14,909 86	45,455 19	52,801 47
LIABILITIES					
Debenture Balance	4,225 51	4,148 60	11,121 02	15,745 27	14,202 32
Accounts Payable			1,822 07		2,012 37
Bank Overdraft			177 58		
Other Liabilities					
H.E.P.C. Operating Account	3,205 52	1,488 62		662 97	
Total Liabilities	7,431 03	5,637 22	13,120 67	16,408 24	16,214 69
RESERVES					
Debentures Paid	269 49	346 40	437 81	8,967 71	10,510 66
Sinking Fund Reserve				943 97	1,895 63
Reserve for Equity in Hydro Sys.					97 88
Reserve for Equity in Rural Lines	675 00	890 00		7,156 00	8,229 04
Depreciation Reserve					
Total Reserves	944 49	1,236 40	437 81	17,067 68	20,733 21
Surplus			1,351 38	11,979 27	15,853 57
Total	8,375 52	6,873 62	14,909 86	45,455 19	52,801 47
Percentage of Net Debt to Total Assets	107.5	92.7	89.0	36.1	31.8

“A”—Continued
of Hydro Municipalities as at December 31st:

Milverton 939		Mimico 2,490		Mitchell 1,672		Moorefield P.V.	
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
237 20	237 20	98 30	98 30	5,737 10	5,737 10		
6,383 37	7,045 44	25,588 93	28,104 19	9,034 86	9,034 86		
				9,517 53	10,898 81	2,590 63	2,598 73
						857 72	857 72
2,884 56	2,884 56	5,948 79	6,201 05	2,253 15	4,450 21	507 04	577 00
1,495 69	1,900 92	8,412 29	9,834 93	4,214 38	5,032 56	295 88	295 88
509 82	541 10	1,070 70	1,425 96	1,063 55	1,063 55		
						348 35	348 35
557 93	557 93	1,848 49	1,860 91				
				1,500 00	1,500 00		
12,068 57	13,167 15	42,967 50	47,525 34	33,320 57	37,717 09	4,599 62	4,677 68
602 96	77 41	54 51	130 92	2,701 91	2,838 50	227 16	669 71
2,000 00	3,218 19	235 16	320 79	288 47	313 45	13 37	21 71
	15 53	223 15	69 09	823 26	1,026 17	40 06	101 10
		584 69	897 85	1,614 88	2,217 93		
977 27	1,770 27	3,286 33	3,762 43	1,708 89	2,185 59		103 33
15,648 80	18,248 55	47,351 34	52,706 42	40,457 98	46,298 73	4,880 21	5,573 53
						243 97	16 06
15,648 80	18,248 55	47,351 34	52,706 42	40,457 98	46,298 73	5,124 18	5,589 59
8,316 70	7,979 12	22,410 08	21,570 98	7,041 86	3,879 85	4,241 47	4,100 95
228 96	988 76		111 92			249 01	740 59
						205 17	
8,545 66	8,967 88	22,410 08	21,682 90	7,041 86	3,879 85	4,695 65	4,841 54
1,183 30	1,520 88	3,589 92	4,429 02	10,253 36	13,415 37	258 53	399 05
		584 69	897 85	1,614 88	2,217 93		
1,262 00	1,789 00	8,547 00	10,730 00	9,100 00	10,884 00	170 00	349 00
2,445 30	3,309 88	12,721 61	16,056 87	20,968 24	26,517 30	428 53	748 05
4,657 84	5,970 79	12,219 65	14,966 65	12,447 88	15,901 58		
15,648 80	18,248 55	47,351 34	52,706 42	40,457 98	46,298 73	5,124 18	5,589 59
54.6	49.1	47.3	41.8	17.4	8.8	96.2	86.8

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Mount Brydges P.V.		Niagara-on- the-Lake 1,918		Niagara Falls 14,207
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....				200 00	13,364 80
Sub-Station Equipment.....				1,148 47	23,258 63
Distribution System, Overhead...	2,702 22	2,702 22		6,946 92	71,880 24
Dist. System, Underground.....					
Line Transformers.....	641 25	641 25		1,680 12	56,266 60
Meters.....	942 28	980 89		1,817 34	46,765 89
Street Light Equipment, Regular.	120 09	120 09		507 34	13,426 63
Street Light Equip., Ornamental.					16,000 00
Miscellaneous Exposition Exp....	143 82	143 82		948 51	2,357 29
Steam or Hydraulic Plant.....					
Old Plant.....			8,867 99		2,268 48
Total Plant.....	4,549 66	4,588 27	8,867 99	13,248 70	245,588 56
Bank and Cash Balance.....	952 35	1,368 98	649 56	903 70	100 00
Securities and Investments.....					
Accounts Receivable.....	546 97	532 00	833 33	2,171 14	13,413 66
Inventories.....	28 68	34 00			
Sinking Fund on Local Debentures					
Equity in Hydro System.....					
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....		43 53	47 72	438 26	7,276 83
Total Assets.....	6,077 66	6,566 78	10,398 60	16,761 80	266,379 05
Deficit.....			438 05		
Total.....	6,077 66	6,566 78	10,836 65	16,761 80	266,379 05
LIABILITIES					
Debenture Balance.....	3,894 79	3818 64	10,836 65	9,853 87	87,701 75
Accounts Payable.....	290 39			945 06	1,504 19
Bank Overdraft.....					38,129 03
Other Liabilities.....				64 74	
H.E.P.C. Operating Account.....	402 19				
Total Liabilities.....	4,587 37	3,818 64	10,836 65	10,863 67	127,334 97
RESERVES					
Debentures Paid.....	325 21	401 36		982 78	66,541 25
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys..					
Reserve for Equity in Rural Lines					
Depreciation Reserve.....	729 00	936 00		420 00	28,953 00
Total Reserves.....	1,054 21	1,337 36		1,402 78	95,494 25
Surplus.....	436 08	1,410 78		4,495 35	43,549 83
Total.....	6,077 66	6,566 78	10,836 65	16,761 80	266,379 05
Percentage of Net Debt to Total Assets.....	75.5	58.1	104.2	64.8	47.8

“A”—Continued

of Hydro Municipalities as at December 31st. 1920

Niagara Falls		New Hamburg		New Toronto		Norwich	
14,207		1,356		2,551		1,262	
1920		1919		1920		1919	
1920		1919		1920		1920	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
13,364 80	2,317 59	2,317 59			910 40	910 40	
23,319 72	1,083 10	1,083 10					
79,713 84	8,672 32	9,640 40	26,401 13	27,875 65	7,395 17	7,616 66	
70,291 03	4,084 29	4,084 29	4,765 36	6,871 11	2,499 03	2,799 78	
55,063 72	3,872 42	4,057 18	6,993 96	8,055 41	3,523 11	3,984 09	
13,484 80	1,149 43	1,149 43	708 67	708 67	596 26	795 97	
16,000 00					1,956 25	1,956 25	
4,631 59	1,001 70	1,001 70	1,378 82	1,378 82	970 09	1,117 34	
2,164 46	5,242 56	5,242 56			3,509 82	3,509 82	
278,033 96	27,423 41	28,576 25	40,247 94	44,889 66	21,360 13	22,690 31	
1,483 30	1,633 37	287 87		18,749 75	1,521 29	3,671 12	
12,887 65	2,183 60	2,314 60	4,274 68	1,655 17	3,451 26	4,015 12	
	4,466 99	7,070 68			1,357 21	837 45	
	1,695 98	2,336 29		1,177 75	1,124 05	1,656 49	
						3,470 81	
1,807 30							
5,079 29			29,644 64	26,925 97	1,983 75	2,868 45	
299,291 50	37,403 35	40,585 69	74,167 26	93,398 30	30,797 69	39,209 75	
299,291 50	37,403 35	40,585 69	74,167 26	93,398 30	30,797 69	39,209 75	
126,865 06	15,012 64	14,592 35	7,180 95	7,019 58	11,900 80	11,601 00	
1,807 30		1,170 91	183 12	2,902 44	638 75	1,224 79	
			807 74				
	2,255 16	982 78					
128,672 36	17,267 80	16,746 04	8,171 81	9,922 02	12,539 55	12,825 79	
78,377 94	2,716 44	3,136 73	819 05	980 42	1,855 20	2,155 00	
	1,695 98	2,336 29		1,177 75	1,124 05	1,656 49	
						3,470 81	
38,830 65	7,125 00	8,252 00	5,072 00	6,977 00	3,972 00	3,476 36	
117,208 59	11,537 42	13,725 02	5,891 05	9,135 17	6,951 25	10,758 66	
53,410 55	8,598 13	10,114 63	60,104 40	74,341 11	11,306 89	15,625 30	
299,291 50	37,403 35	40,585 69	74,167 26	93,398 30	30,797 69	39,209 75	
42.9	46.2	43.7	11.2	10.7	47.2	34.1	

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Concluded

Municipality Population	North Norwich Township		South Norwich Township		Oil Springs 548
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....					42 00
Sub-Station Equipment.....					
Distribution System, Overhead...	1,111 96	1,111 96	948 07	1,989 03	6,497 71
Dist. System, Underground.....					
Line Transformers.....	3,627 17	3,627 17	2,411 09	2,411 09	2,418 04
Meters.....	1,018 34	1,018 34	479 00	479 00	884 35
Street Light Equipment, Regular.					276 29
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp..	234 23	234 23	342 78	339 84	1,469 24
Steam or Hydraulic Plant.....					
Old Plant.....					
Total Plant.....	5,991 70	5,991 70	4,180 94	5,218 96	11,587 63
Bank and Cash Balance.....		88 36			
Securities and Investments.....					
Accounts Receivable.....	88 36		1,555 70		1,197 73
Inventories.....					
Sinking Fund on Local Debentures					
Equity in Hydro System.....					
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....					
Total Assets.....	6,080 06	6,080 06	5,736 64	5,218 96	12,785 36
Deficit.....					473 46
Total.....	6,080 06	6,080 06	5,736 64	5,218 96	13,258 82
LIABILITIES					
Debenture Balance.....	5,699 53	5,516 19	4,900 55	4,726 91	9,134 52
Accounts Payable.....	54 06	54 06	517 68		1,728 51
Bank Overdraft.....					642 52
Other Liabilities.....					
H.E.P.C. Operating Account.....					514 79
Total Liabilities.....	5,753 59	5,570 25	5,418 23	4,726 91	12,020 34
RESERVES					
Debentures Paid.....	326 47	509 81	318 41	492 05	865 48
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines					
Depreciation Reserve.....					373 00
Total Reserves.....	326 47	509 81	318 41	492 05	1,238 48
Surplus.....					
Total.....	6,080 06	6,080 06	5,736 64	5,218 96	13,258 82
Percentage of Net Debt to Total Assets.....	94.6	91.6	94.4	90.5	94.0

"A"—Continued

of Hydro Municipalities as at December 31st. 1920

Oil Springs 548	Otterville P.V.	Point Edward	Palmerston 1,815	Parkhill
1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
42 00				
7,388 73	2,993 64	3,195 01	691 88	691 88
			11,581 34	12,651 28
2,636 14	1,588 47	1,588 47		
1,021 06	860 36	1,006 93	2,195 34	3,000 88
276 29	215 60	215 60	2,836 25	3,550 87
			738 00	746 32
1,469 24	142 00	142 00		
			1,638 06	1,638 06
			4,018 71	4,018 71
12,833 46	5,800 07	6,148 01		
			23,699 58	26,298 00
	150 82	565 09		
		1,000 00	292 62	982 86
385 01				
	16 02	14 77	143 31	232 69
			5,207 81	6,200 08
	122 81	341 57		
				53 53
13,218 47	6,089 72	8,069 44		
			29,343 32	33,713 63
			221 51	
13,218 47	6,089 72	8,069 44		
			29,564 83	33,713 63
8,810 74	3,964 85	3,810 41		
1,224 96		50 00	11,635 26	10,496 54
546 10			2,795 05	3,534 55
251 64			1,847 78	659 32
10,833 44	3,964 85	3,860 41		
			16,278 09	14,690 41
1,189 26	535 15	689 59		
			10,364 74	11,503 46
				345 84
816 00	591 00	854 00		
			2,922 00	3,811 00
2,005 26	1,126 15	1,543 59		
379 77	998 72	2,665 44	13,286 74	15,314 46
				3,708 76
13,218 47	6,089 72	8,069 44		
			29,564 83	33,713 63
				18,624 59
81.9	65.1	47.8	55.0	43.5
				91.6

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality	Paris		Petrolia	
Population	4,866		2,954	
	1919	1920	1919	1920
	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS				
Lands and Buildings	7,626 26	7,626 26		
Sub-Station Equipment	10,948 32	10,948 32	2,361 84	2,361 84
Distribution System, Overhead	33,984 32	34,895 71	24,801 40	24,871 62
Dist. System, Underground				
Line Transformers	11,284 45	12,260 62	12,772 61	15,527 35
Meters	9,944 79	10,802 19	6,327 65	7,760 78
Street Light Equipment, Regular	2,228 17	2,265 20	818 01	818 01
Street Light Equip., Ornamental			3,864 07	3,864 07
Miscellaneous Construction Exp.	211 32	211 32	4,635 76	4,485 76
Steam or Hydraulic Plant				
Old Plant	16,684 76	16,684 76	3,389 94	3,389 94
Total Plant	92,912 39	95,694 38	58,971 28	63,079 37
Bank and Cash Balance	3,233 05	5,099 86		
Securities and Investments		6,000 00		
Accounts Receivable			341 82	425 83
Sinking Fund Reserve			6,099 55	7,955 75
Sinking Fund on Local Debentures	15,196 07	18,043 39		
Equity in Hydro System		424 14		
Equity in Rural Lines				
Other Assets	3,000 00			
H.E.P.C. Operating Account	3,303 56	2,542 11		
Total Assets	117,635 07	127,803 88	65,412 65	71,460 95
Deficit				
Total	117,635 07	127,803 88	65,412 65	71,460 95
LIABILITIES				
Debenture Balance	49,356 46	47,305 01	46,603 65	45,519 39
Accounts Payable			3,307 85	1,115 08
Bank Overdraft			777 88	1,004 57
Other Liabilities				
H.E.P.C. Operating Account			2,707 59	130 45
Total Liabilities	49,356 46	47,305 01	53,396 97	47,769 49
RESERVES				
Debentures Paid	27,643 54	29,694 99	3,396 35	4,480 61
Sinking Fund Reserve	15,196 07	18,043 39		
Reserve for Equity in Hydro Sys.		424 14		
Reserve for Equity in Rural Lines				
Depreciation Reserve	17,126 00	20,802 00	5,720 00	8,134 00
Total Reserves	59,965 61	68,964 52	9,116 35	12,614 61
Surplus	8,313 00	11,534 35	2,899 33	11,076 85
Total	117,635 07	127,803 88	65,412 65	71,460 95
Percentage of Net Debt to Total Assets	41.9	37.1	81.6	66.8

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Plattsville P.V.		Port Credit 1,100		Port Dalhousie 1,391	
1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
		675 00	675 00		
2,522 10	2,522 10	8,744 10	9,533 84	4,049 29	4,156 94
906 14	906 14	1,026 32	1,479 17	3,449 02	3,7 7 52
963 78	1,086 58	2,262 59	2,435 72	4,015 93	4,015 93
133 65	133 65	502 72	541 47	268 67	509 05
535 92	535 92	626 31	626 31	1,241 16	1,241 16
				6,018 38	6,018 38
5,061 59	5,184 3	13,837 04	15,296 51	19,042 45	19,698 98
3,021 32	1,116 78	187 60	1,518 80	81 10	457 42
607 59	644 04	1,380 00	1,800 00		
17 00			26 55	100 56	
	461 85	199 47	305 66		701 26
		3 89			144 36
		1,753 99	1,793 16	119 42	
8,707 50	7,407 06	17,361 99	20,740 68	19,343 53	21,002 02
1,824 68	883 72			1,223 73	981 26
10,532 18	8,290 78	17,361 99	20,740 68	20,567 26	21,983 28
4,801 45	4,700 85	7,187 94	6,938 71	10,870 65	10,393 13
10 58		95 87	1,486 01	4,793 26	5,253 51
4,330 52	1,416 85				
9,142 55	6,117 70	7,283 81	8,424 72	15,663 91	15,646 64
435 55	536 15	1,312 06	1,561 29	1,629 35	2,106 87
	461 85	199 47	305 66		701 26
954 08	1,175 08	3,630 00	4,304 00	3,274 00	3,528 51
1,389 63	2,173 08	5,141 53	6,170 95	4,903 35	6,336 64
		4,936 65	6,145 01		
10,532 18	8,290 78	17,361 99	20,740 68	20,567 26	21,983 28
86.8	88.1	41.9	41.2	80.9	74.5

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Port Stanley 732		Preston 5,184		Princeton P.V.
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.....	1,505 38	1,505 38	13,879 36	13,959 70	.....
Sub-Station Equipment.....	.....	.....	44,202 57	46,067 57	2,002 42
Distribution System, Overhead...	10,626 33	11,509 68	.....	.....	.....
Dist. System, Underground.....	.....	.....	18,294 86	21,754 79	296 86
Line Transformers.....	2,531 45	4,594 69	14,986 15	15,948 48	552 14
Meters.....	2,345 42	2,430 02	3,061 11	3,269 36	116 30
Street Light Equipment, Regular.	570 60	654 10	.....	.....	.....
Street Light Equip., Ornamental.	.....	.....	5,155 54	5,730 84	64 35
Miscellaneous Construction Exp..	5,517 16	5,517 16	.....	.....	.....
Steam or Hydraulic Plant.....	.....	.....	23,549 22	23,549 22	.....
Old Plant.....	577 51	577 51	.....	.....	.....
Total Plant.....	23,673 85	26,788 54	123,128 81	130,279 96	3,032 07
Bank and Cash Balance.....	2,801 00	118 60	121 15	222 36	790 18
Securities and Investments.....	.....	3,419 25	.....	.....	.....
Accounts Receivable.....	4,765 19	180 92	9,347 37	9,950 47	655 66
Sinking Fund Reserve.....	11 80	143 50	1,148 02	.....	.....
Sinking Fund on Local Debentures	.....	.....	.....	.....	.....
Equity in Hydro System.....	1,286 67	1,962 33	4,435 69	6,514 42	.....
Equity in Rural Lines.....	.....	.....	1,199 74	1,412 53	.....
Other Assets.....	.....	.....	.....	.....	.....
H.E.P.C. Operating Account.....	.....	1,318 88	15,913 87	13,115 32	.....
Total Assets.....	32,538 51	33,932 02	155,294 65	161,495 06	4,477 91
Deficit.....	.....	.....	.....	.....	1,193 12
Total.....	32,538 51	33,932 02	155,294 65	161,495 06	5,671 03
LIABILITIES					
Debtenture Balance.....	15,942 58	15,506 96	65,187 57	60,935 82	3,254 74
Accounts Payable.....	.....	5 00	2,224 26	.....	72 32
Bank Overdraft.....	.....	.....	1,999 54	4,981 46	.....
Other Liabilities.....	5 00	.....	.....	.....	.....
H.E.P.C. Operating Account.....	491 60	.....	.....	.....	1,529 71
Total Liabilities.....	16,439 18	15,511 96	69,411 37	65,917 28	4,856 77
RESERVES					
Debentures Paid.....	3,007 42	3,443 04	23,677 94	27,929 69	295 26
Sinking Fund Reserve.....	.....	.....	.....	.....	.....
Reserve for Equity in Hydro Sys..	1,286 67	1,962 33	4,435 67	6,514 42	.....
Reserve for Equity in Rural Lines	.....	.....	1,199 74	1,412 53	.....
Depreciation Reserve.....	5,387 00	6,356 00	22,191 00	33,581 00	519 00
Total Reserve.....	9,681 09	11,761 37	57,504 35	69,437 64	814 26
Surplus.....	6,418 24	6,658 69	28,378 93	26,140 14	.....
Total.....	32,538 51	33,932 02	155,294 65	161,495 06	5,671 03
Percentage of Net Debt to Total Assets.....	50.5	48.5	44.7	42.7	108.4

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Princeton	Ridgetown		Rodney		Rockwood.	
P.V.	2,180		656		P.V.	
1920	1919	1920	1919	1920	1920	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
					79 00	79 00
	889 26	889 26				
2,002 42	10,618 08	10,923 47	5,588 31	5,809 83	4,316 82	4,966 73
296 86	4,260 43	4,260 43	1,421 85	1,421 85	1,211 93	1,211 93
552 14	3,472 77	4,097 79	1,438 91	1,827 34	1,263 28	1,272 73
116 30	826 92	826 92	518 74	518 74	257 50	257 50
	1,319 10	1,319 10				
64 35	363 25	363 25	679 09	679 09	308 05	308 05
	5,348 36	5,131 16	700 00	700 00		
3,032 07	27,098 17	27,811 38	10,346 90	10,956 85	7,436 58	8,095 94
650 74	2,502 03	6,282 20	52 62	466 01		
	3,500 00	3,500 00				
521 77	763 83	717 00	104 50	104 50		
	2,822 88	2,733 18		53 25	108 98	79 25
186 96					168 49	392 34
			158 73			
	532 57	1,037 50	296 19	1,343 07		
4,391 54	37,219 48	42,081 26	10,958 94	12,923 68	7,714 05	8,567 53
1,048 93						
5,440 47	37,219 48	42,081 26	10,958 94	12,923 68	7,714 05	8,567 53
3,186 54	16,446 87	15,594 32	8,128 24	7,990 48	522 20	266 80
				637 92		
			772 30		74 32	252 75
	1,319 10	1,319 10				
1,045 51					1,543 92	1,450 20
4,232 05	17,765 97	16,913 42	8,900 94	8,628 40	2,140 44	1,969 75
363 46	3,009 12	3,861 67	371 76	509 52	1,477 80	1,733 20
186 96					168 49	392 34
658 00	2,881 00	3,821 00	650 00	1,047 00	1,727 00	2,103 00
1,208 42	5,890 12	7,682 67	1,021 76	1,556 52	3,373 29	4,228 54
	13,563 39	17,485 17	1,036 64	2,738 76	2,200 32	2,369 24
5,440 47	37,219 48	42,081 26	10,958 94	12,923 68	7,714 05	8,567 53
100.6	47.7	40.2	81.2	66.7	27.7	24.1

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	St. Catharines 19,195		St. George P.V.		St. Jacobs P.V.
	1919	1920	1919	1920	1919
Assets	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings	39,017 69	39,247 02			
Sub-Station Equipment	58,835 22	58,760 22			
Distribution System, Overhead	126,049 31	136,484 31	2,957 34	3,114 31	3,446 40
Dist. System, Underground					
Line Transformers	41,110 82	45,443 52	851 31	851 31	877 50
Meters	38,313 56	42,737 69	1,157 31	1,157 31	1,000 24
Street Light Equipment, Regular	9,941 91	10,259 06	218 11	218 11	263 53
Street Light Equip., Ornamental	10,407 20	10,407 20			
Miscellaneous Construction Exp	36,855 82	37,253 90	374 18	374 18	452 22
Steam or Hydraulic Plant					
Old Plant					
Total Plant	360,531 53	380,592 92	5,558 25	5,715 22	6,039 89
Bank and Cash Balance			408 27	2,146 42	1,750 55
Securities and Investments	13,000 00		3,000 00	3,000 00	
Accounts Receivable	11,285 61	11,204 71	505 83	506 82	305 82
Inventories	2,297 11	2,413 09	58 16	42 04	
Sinking Fund on Local Debenture's	14,835 25	18,622 31			
Equity in Hydro System					
Equity in Rural Lines		995 09			
Other Assets					
H.E.P.C. Operating Account			58 44	183 44	154 71
Total Assets	401,949 50	413,828 12	9,588 95	11,593 94	8,250 97
Deficit					
Total	401,949 50	413,828 12	9,588 95	11,593 94	8,250 97
LIABILITIES					
Debenture Balance	222,540 89	218,802 1	5,537 68	5,429 41	5,646 35
Accounts Payable	5,181 95	9,737 91	66 13	51 94	
Bank Overdraft	5,313 70	118 64			
Other Liabilities	32,677 87	13,407 20			
H.E.P.C. Operating Account					
Total Liabilities	265,71 41	242,065 90	5,603 81	5,481 35	5,646 35
RESERVES					
Debentures Paid	9,481 94	13,220 76	462 32	570 59	353 65
Sinking Fund Reserve	14,835 25	18,622 31			
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines		995 09			
Depreciation Reserve	39,033 66	49,246 44	831 00	1,091 00	478 00
Total Reserves	63,350 85	82,084 60	1,293 32	1,661 59	831 65
Surplus	72,884 24	89,677 62	2,691 82	4,451 00	1,772 97
Total	401,949 50	413,828 12	9,588 95	11,593 94	8,250 97
Percentage of Net Debt to Total Assets	66.1	58.5	57.9	47.2	68.4

"A"—Continued

of Hydro Municipalities as at December 31st, 1920

St. Jacobs	St. Marys		St. Thomas		Sarnia	
P.V.	3,886		17,759		12,649	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	3,000 00	3,000 00	28,393 75	35,372 95	36,761 06	61,838 74
.....	11,876 64	15,832 26	64,058 04	65,779 03	61,922 88	74,185 23
3,482 98	26,507 66	30,609 52	77,942 80	83,025 92	96,992 61	105,466 74
.....	.....	.....	7,520 26	9,925 36	.....	.....
877 50	10,567 84	11,375 67	21,049 13	23,834 08	47,204 75	51,864 06
1,021 20	11,655 64	13,441 83	37,733 90	40,407 26	32,213 63	37,731 80
263 3	2,195 64	2,196 84	13,035 72	13,121 74	4,671 29	4,861 31
.....	.....	.....	7,525 69	7,525 69	4,482 11	7,482 11
452 22	2,077 54	3,028 36	4,954 17	7,908 39	4,518 93	16,205 81
.....	20,696 85	20,696 85	1,071 30	791 95	58,686 66	56,098 96
6,097 43	88,577 81	100,181 33	263,284 76	287,692 37	350,453 92	414,734 76
3,036 54	.....	.....	3,585 61	.....	3,095 01	6,143 48
.....	.....	.....	23,306 81	33,306 81	.....	.....
287 82	173 86	323 53	9,903 36	8,549 03	4,143 31	11,069 23
.....	2,506 78	1,668 26	8,277 32	16,523 51	6,449 92	12,318 40
.....	3,777 31	4,222 91	.....	.....	.....	.....
.....	3,676 05	5,324 51	11,628 49	15,920 00	.....	.....
.....	.....	.....	187 53	229 67	.....	.....
220 32	1,688 37	.....	24,718 14	25,788 42	6,317 28	23,148 99
9,642 09	100,400 18	111,720 54	344,892 04	388,009 51	370,459 44	467,414 86
.....
9,642 09	100,400 18	111,720 54	344,892 04	388,009 51	390,459 44	467,414 86
5,454 79	32,594 70	37,823 81	101,580 78	96,624 21	233,729 35	278,177 00
.....	326 42	326 42	4,781 14	10,757 20	14,195 58	27,801 53
.....	1,789 42	1,860 36	.....	3,265 66	25,000 00	.....
.....	.....	.....	.....	.....	9,871 67	23,871 67
.....	.....	426 67	.....	.....	.....	.....
5,454 79	34,710 54	40,437 26	106,361 92	110,647 07	282,796 60	329,850 20
545 21	30,652 32	33,423 21	41,503 65	46,460 22	14,270 65	19,823 00
.....	3,777 31	4,222 91	.....	.....	10,500 00	.....
.....	3,676 05	5,324 51	11,628 49	15,920 00	.....	.....
.....	.....	.....	187 53	229 67	.....	.....
737 00	22,808 00	24,725 99	50,543 00	61,800 00	24,713 0	34,854 00
1,282 21	60,913 68	67,696 62	103,862 67	124,409 89	49,483 65	54,677 00
2,905 09	4,775 96	3,586 66	134,667 45	152,952 55	38,179 19	82,887 66
9,642 09	100,400 18	111,720 54	344,892 04	388,009 51	370,459 44	467,414 86
56.6	34.6	36.2	31.9	30.7	76.3	70.5

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Seaforth 2,027		Simcoe 3,818		Springfield 426
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....	1,251 57	1,251 57	1,496 75	1,496 75	.....
Sub-Station Equipment.....	6,031 75	5,995 27	5,851 99	5,611 99	.....
Distribution System, Overhead....	16,704 45	18,625 65	17,149 94	18,513 46	4,188 31
Dist. System, Underground.....	.....	.....	.....	.....	.....
Line Transformers.....	6,874 14	6,474 14	3,291 16	5,512 15	671 74
Meters.....	4,756 19	5,823 74	3,327 65	4,650 35	734 07
Street Light Equipment, Regular...	812 66	939 84	1,478 85	1,506 26	199 52
Street Light Equip., Ornamental...	.....	.....	2,527 16	2,527 16	.....
Miscellaneous Construction Exp...	355 98	355 98	3,737 16	3,788 62	675 08
Steam or Hydraulic Plant.....	.....	.....	.....	.....	.....
Old Plant.....	.....	.....	927 92	927 92	.....
Total Plant.....	36,786 74	39,466 19	39,788 58	44,534 66	6,468 72
Bank and Cash Balance.....	7,543 71	682 42	3,914 54	531 94	233 29
Securities and Investments.....	.....	5,000 00	4,000 00	8,000 00	.....
Accounts Receivable.....	537 80	550 40	1,407 92	1,406 29	.....
Inventories.....	3,054 39	5,627 14	27 77	15 49	196 32
Sinking Fund on Local Debentures...	4,107 20	4,717 23	.....	.....	.....
Equity in Hydro System.....	5,027 25	6,438 95	.....	.....	.....
Equity in Rural Lines.....	.....	.....	.....	.....	102 15
Other Assets.....	.....	.....	.....	.....	.....
H.E.P.C. Operating Account.....	7,956 19	8,159 84	3,479 07	4,483 57	337 96
Total Assets.....	65,013 28	70,642 17	52,617 88	58,971 95	7,338 44
Deficit.....	.....	.....	.....	.....	.....
Total.....	65,013 28	70,642 17	52,617 88	58,971 95	7,338 44
LIABILITIES					
Debenture Balance.....	25,000 00	25,000 00	35,434 90	35,434 90	3,746 76
Accounts Payable.....	.....	.....	560 00	486 03	1,095 12
Bank Overdraft.....	.....	.....	.....	.....	.....
Other Liabilities.....	.....	.....	3,500 00	3,500 00	.....
H.E.P.C. Operating Account.....	.....	.....	.....	.....	.....
Total Liabilities.....	25,000 00	25,000 00	39,494 90	39,420 93	4,841 88
RESERVES					
Debentures Paid.....	.....	.....	.....	.....	1,253 24
Sinking Fund Reserve.....	4,107 20	4,717 23	.....	.....	.....
Reserve for Equity in Hydro Sys...	5,027 25	6,438 95	.....	.....	.....
Reserve for Equity in Rural Lines...	.....	.....	.....	.....	102 15
Depreciation Reserve.....	11,225 00	13,188 00	4,660 50	6,204 50	.....
Total Reserves.....	20,359 45	24,344 18	4,660 50	6,204 50	1,355 39
Surplus.....	19,653 83	21,297 99	8,462 48	13,346 52	1,141 17
Total.....	65,013 28	70,642 17	52,617 88	58,971 95	7,338 44
Percentage of Net Debt to Total Assets	38.4	35.4	75.1	67.1	65.9

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Springfield 426	Stamford Township		Stratford 18,106		Strathroy 2,637	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	388 80	388 80	44,448 44	44,448 44	1,070 00	1,070 00
.....	4,671 39	4,671 39	53,233 23	53,114 64	4,691 16	7,842 31
4,194 51	18,365 05	25,193 96	104,256 06	110,527 12	19,532 63	21,237 04
.....
671 74	5,135 06	8,287 54	20,953 14	31,060 09	5,677 77	9,440 83
734 07	4,297 46	6,489 74	41,329 76	48,104 18	6,310 13	7,718 71
199 52	1,536 56	1,543 06	6,089 46	6,089 46	1,499 14	1,566 10
.....	.....	.....	11,075 05	11,075 05	.....	.....
675 08	4,445 52	4,510 02	14,124 57	13,736 03	578 15	694 30
.....
.....	9,596 96	9,497 66	16,260 00	16,260 00	12,343 15	12,343 15
6,474 92	48,436 80	60,582 17	311,769 71	334,415 01	51,702 13	61,912 44
312 31	2,786 71	.....	12,278 06	30,284 61	.....	.....
.....
33 00	537 93	1,617 15	2,819 08	7,302 90	.....	.....
196 52	.....	24 11	1,789 84	2,530 39	7,216 10	11,075 54
.....	.....	.....	33,167 14	38,827 83	.....	.....
.....	.....	.....	9,711 21	13,503 54	.....	1,189 60
211 73	.....	.....	476 51	568 61	.....	.....
430 79	3,555 12	3,353 43	25,401 19	23,841 81	8,664 40	10,110 18
7,659 07	55,316 56	65,576 86	397,412 74	451,274 70	67,582 63	84,287 76
.....
7,659 07	55,316 56	65,576 86	397,412 74	451, 274 70	67,582 63	84,287 76
.....
3,286 53	27,238 83	46,431 99	204,190 00	222,000 00	40,252 27	38,489 67
1,028 06	15,667 72	482 50	14,127 36	16,587 36	.....	3,799 07
.....	.....	2,883 98	.....	.....	339 31	2,012 17
.....
.....
4,314 59	42,906 55	49,798 47	218,317 36	238,587 36	40,591 58	44,300 91
1,713 47	761 17	1,568 01	41,610 00	43,800 00	5,979 73	7,742 33
.....	.....	.....	33,167 14	38,827 83	.....	.....
.....	.....	.....	9,711 21	13,503 54	.....	1,189 60
211 73	.....	.....	476 51	568 61	.....	.....
.....	3,643 00	4,847 24	58,846 04	70,797 04	7,382 00	9,455 00
1,925 20	4,404 17	6,415 25	143,810 90	167,497 02	13,361 73	18,386 93
1,419 28	8,005 84	9,363 14	35,284 48	45,190 32	13,629 32	21,599 92
7,659 07	55,316 56	65,576 86	397,412 74	451,274 70	67,582 63	84,287 76
.....
65.9	77.6	75.9	54.9	54.5	60.1	53.3

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Scarboro Township		Tavistock 917		Thames- ford P.V.
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....			158 34	234 00	
Sub-Station Equipment.....					
Distribution System, Overhead....	14,965 31	17,825 97	6,009 34	6,096 00	4,222 49
Dist. System, Underground.....					
Line Transformers.....	4,934 77	6,200 57	1,361 07	1,365 80	1,741 01
Meters.....	7,089 03	8,631 14	2,229 1	368 74	1,121 04
Street Light Equipment, Regular...	2,638 91	2,638 91	666 39	666 39	176 85
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp....	727 60	862 05	566 89	570 89	214 02
Steam or Hydraulic Plant.....					
Old Plant.....					
Total Plant.....	30,355 62	36,158 64	10,991 16	11,301 95	7,475 41
Bank and Cash Balance.....	49 65		3,176 35	3,858 90	1,169 07
Securities and Investments.....					
Accounts Receivable.....	4,008 39	2,186 36	7 06	1,696 80	
Inventories.....			148 93	276 80	10 00
Sinking Fund on Local Debenture's..					
Equity in Hydro System.....					
Equity in Rural Lines.....	880 62	1,508 41			
Other Assets.....					
H.E.P.C. Operating Account.....			3,666 36	4,459 79	
Total Assets.....	35,294 28	39,853 41	17,989 86	21,594 24	8,654 48
Deficit.....	1,496 95	1,635 77			
Total.....	36,791 23	41,489 18	17,989 86	21,594 24	8,654 48
LIABILITIES					
Debenture Balance.....	17,516 03	16,975 58	5,715 29	5,610 74	4,856 54
Accounts Payable.....	1,679 00	4,015 24	12 50	25 00	
Bank Overdraft.....	15,033 44	13,709 42			
Other Liabilities.....					
H.E.P.C. Operating Account.....	9 17	673 11			1,496 05
Total Liabilities.....	34,237 64	35,373 35	5,727 79	5,635 74	6,352 59
RESERVES					
Debentures Paid.....	983 97	1,524 42	284 71	389 26	501 49
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys....					
Reserve for Equity in Rural Lines...	880 62	1,508 41			
Depreciation Reserve.....	689 00	3,083 00	1,151 00	1,620 00	1,590 08
Total Reserves.....	2,553 59	6,115 83	1,435 71	2,009 26	2,091 57
Surplus.....			10,826 36	13,949 24	210 32
Total.....	36,791 23	41,489 18	17,989 86	21,594 24	8,654 48
Percentage of Net Debt to Total Assets	95.8	88.8	31.9	26.1	73.4

"A"—Continued

of Hydro Municipalities as at December 31st. 1920

Thamesford P.V.	Thamesville 808		Thorndale P.V.		Tilbury 1,623	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
					957 46	957 46
4,229 49	3,790 42	4,545 12	2,055 26	2,055 26	5,584 42	5,637 89
1,741 01	1,287 77	2,448 34	939 20	939 20	1,758 22	2,324 62
1,146 12	1,525 90	1,754 51	966 42	1,005 12	2,226 44	2,364 78
176 85	325 94	325 94	80 36	80 36	194 49	194 49
214 02	561 75	561 75	305 63	305 63	1,159 48	1,159 48
	4,258 80	4,258 80			3,553 47	3,553 47
7,507 49	11,750 58	13,894 46	4,346 87	4,385 57	15,433 98	16,192 19
1,218 07	547 91		494 65	643 50	1,400 50	570 44
	1,201 09	830 30		263 78	500 00	500 00
24 71	658 57	432 50	60 80	40 80	70	
266 34				524 31	3 83	
	7 77	7 77				
191 49						
9,208 10	14,165 92	15,165 03	4,902 32	5,857 96	17,339 01	17,262 63
	884 59		596 77		3,662 97	2,862 60
9,208 10	15,050 51	15,165 03	5,499 09	5,857 96	21,001 98	20,125 23
4,641 81	10,084 32	9,775 78	2,848 55	2,728 75	12,931 21	12,622 27
	234 58	382 00	572 13	459 61		
		186 11				
	2,025 13	1,283 27	1,288 82	953 74	5,258 98	3,888 23
4,641 81	12,344 03	11,627 16	4,709 50	4,142 10	18,190 19	16,510 50
716 22	1,103 48	1,412 02	237 93	357 73	1,068 79	1,377 73
266 34				524 31		
1,945 08	1,603 00	2,097 00	551 66	736 66	1,743 00	2,237 00
2,927 64	2,706 48	3,509 02	789 59	1,618 70	2,811 79	3,614 73
1,638 65		28 85		97 16		
9,208 10	15,050 51	15,165 03	5,499 09	5,857 96	21,001 98	20,125 23
51.9	87.0	76.6	96.1	77.6	104.9	95.6

STATEMENT

Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Tillsonburg 2,788		Toronto 499,278		Toronto Township
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings	2,224 27	2,224 27	956,686 83	1,040,628 53	
Sub-Station Equipment	7,556 69	12,195 44	1,500,903 20	1,651,677 02	
Distribution System, Overhead	24,373 10	25,010 07	2,862,526 80	3,059,036 74	12,730 58
Dist. System, Underground			896,426 63	989,358 85	
Line Transformers	9,036 73	9,036 73	632,214 35	764,060 37	8,432 87
Meters	6,407 98	7,131 51	876,178 95	1,005,350 80	4,591 63
Street Light Equip., Regular	1,961 25	1,961 25	705,453 55	716,119 60	
Street Light Equip., Ornamental					
Miscellaneous Construction Exp	718 50	718 50	1,716,308 10	1,853,173 38	660 47
Steam or Hydraulic Plant			38,517 07	38,517 07	
Old Plant			36,609 11	19,797 66	619 65
Total Plant	52,278 52	58,277 77	10,221,824 59	11,137,720 02	27,035 20
Bank and Cash Balance	519 35	681 23	170,495 78	639,014 52	540 56
Securities and Investments	6,000 00	6,000 00	327,316 20		
Accounts Receivable	3,101 08	2,610 42	390,256 90	471,493 88	654 86
Inventories	2,141 28	2,362 82	542,781 80	699,336 22	
Sinking Fund on Local Debentu's	2,802 11	3,294 56	910,100 61	1,093,334 77	
Equity in Hydro System	4,213 47	5,877 20	135,845 22	188,243 53	162 65
Equity in Rural Lines					4,028 03
Other Assets					
H.E.P.C. Operating Account	3,129 01	3,400 80	27,435 97		706 34
Total Assets	74,184 82	82,504 80	12,726,057 07	14,229,142 94	33,127 64
Deficit					
Total	74,184 82	82,504 80	12,726,057 07	14,229,142 94	33,127 64
LIABILITIES					
Debenture Balance	30,423 13	29,572 29	9,154,634 50	9,563,897 31	10,572 92
Accounts payable	2,925 50	1,775 17	281,644 82	449,417 08	102 91
Bank Overdraft					
Other Liabilities			292,360 42	210,744 65	
H.E.P.C. Operating Account				129,125 46	
Total Liabilities	33,348 63	31,347 46	9,728,639 74	10,353,184 50	10,675 83
RESERVES					
Debentures Paid	5,576 87	6,427 71	129,365 50	211,102 69	1,427 08
Sinking Fund Reserve	2,802 11	3,294 56	910,100 61	1,093,334 77	
Reserve for Equity in Hydro Sys	4,213 47	5,877 20	135,845 22	188,243 53	162 65
Reserve for Equity in Rural Line s					4,028 03
Depreciation Reserve	13,715 01	15,451 32	1,591,533 25	2,153,921 85	13,890 00
Total Reserves	26,307 46	31,050 79	2,766,844 58	3,646,602 84	19,507 76
Surplus	14,528 73	20,106 55	230,572 75	229,355 60	2,944 05
Total	74,184 82	82,504 80	12,726,057 07	14,229,142 94	33,127 64
Percentage of Net Debt to Total Assets	44.9	40.9	76.5	73.7	32.2

“A”—Continued

Hydro Municipalities as at December 31st, 1920

Toronto Township	Townsend Township		Vaughan Township		Walkerville 6,279	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
16,950 12	846 21	853 71	4,047 66	4,160 16	16,921 45 29,326 06 34,036 16	20,150 73 36,791 38 41,834 59
10,352 37	1,065 68	1,154 45	2,815 80	3,075 67	15,593 90	24,602 89
5,871 24	269 74	269 74	1,239 29	1,285 59	23,812 24	28,908 34
			122 54	122 54		
1,021 47	85 55	85 55	492 75	499 90	45,883 83 25,293 32	51,000 00 29,152 88
619 65					41,994 26 18,335 05	50,553 46 18,335 05
34,814 85	2,267 18	2,363 45	8,718 04	9,143 86	251,196 27	301,329 32
			301 86	555 09	50 00	50 00
1,788 04	332 82	236 55	1,255 76	978 21	16,756 99 26,211 79	23,862 31 14,211 54
388 29						13,787 19
5,012 83	154 28	230 60	686 05	1,102 17	2,042 09	3,645 56
984 40					6,146 63	19,778 95
42,988 41	2,754 28	2,830 60	10,961 71 1,714 19	11,779 33 2,724 25	302,403 77	376,664 87
42,988 41	2,754 28	2,830 60	12,675 90	14,503 58	302,403, 77	376,664 87
10,161 08	2,529 72	2,454 40	7,793 95	7,574 51	120,067 71	140,862 17
1,500 00			3,578 39	4,702 79	32,914 60	12,725 22
2,090 93					1,049 98	2,927 48
			19 84		45,876 33	52,417 73
13,752 01	2,529 72	2,454 40	11,392 18	12,277 30	199,908 62	208,932 60
1,838 92	70 28	145 60	206 05	425 49	14,191 29	18,396 83
388 29						13,787 19
5,012 83	154 28	230 60	686 05	1,102 17	2,042 09	3,645 56
17,433 93			391 62	698 62	28,948 86	37,561 00
24,673 97	224 56	376 20	1,283 72	2,226 28	45,182 24	73,390 58
4,562 43					57,312 91	94,341 69
42,988 41	2,754 28	2,830 60	12,675 90	14,503 58	302,403 77	376,664 87
32.2	91.9	89.5	103.9	104.2	66.1	57.5

STATEMENT

Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Wallaceburg 4,067		Waterdown 790		Waterford 985
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.....	1,735 58	1,735 58			
Sub-Station Equipment.....	2,234 15	2,234 15			
Distribution System, Overhead....	30,985 76	27,459 76	7,892 42	8,328 63	6,015 19
Dist. System, Underground.....					
Line Transformers.....	14,507 38	15,231 70	1,751 00	1,751 00	2,218 97
Meters.....	9,755 22	11,136 05	2,277 80	2,467 48	2,219 59
Street Light Equipment, Regular..	1,665 13	1,665 13	161 67	161 67	590 10
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp...	3,691 05	4,931 79	100 34	100 34	366 02
Steam or Hydraulic Plant.....					
Old Plant.....	19,562 94	19,510 49			607 69
Total Plant.....	84,137 21	83,904 65	12,183 23	12,809 12	12, 17 56
Bank and Cash Balance.....		4,364 44	685 42	2,972 89	1,435 62
Securities and Investments.....			3,500 00	3,500 00	
Accounts Receivable.....	10,027 51	12,120 84			502 49
Inventories.....	8,685 91	11,163 20	52 48	35 00	139 40
Sinking Fund on Local Debentu's..					
Equity in Hydro System.....			755 48	1,063 75	
Equity in Rural Lines.....			1,181 65	1,441 77	
Other Assets.....					
H.E.P.C. Operating Account.....		4,258 94			2,662 20
Total Assets.....	102,850 63	115,812 07	18,358 26	21,822 53	16,757 27
Deficit.....					
Total.....	102,850 63	115,812 07	18,358 26	21,822 53	16,757 27
LIABILITIES					
Debenture Balance.....	41,435 50	67,171 08	5,900 29	5,479 96	2,506 68
Accounts Payable.....	37,905 72	8,366 63			721 77
Bank Overdraft.....	383 71				
Other Liabilities.....					
H.E.P.C. Operating Account.....	2,159 69		425 49	549 62	
Total Liabilities.....	81,884 62	75,537 71	6,325 78	6,029 58	3,228 45
RESERVES					
Debentures Paid.....	3,564 50	4,365 50	2,099 71	2,520 04	5,238 85
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys...			755 48	1,063 75	
Reserve for Equity in Rural Lines...			1,181 65	1,441 77	
Depreciation Reserve.....	7,842 00	10,470 00	5,752 00	6,852 30	927 00
Total Reserves.....	11,406 50	14,835 50	9,788 84	11,877 86	6,165 85
Surplus.....	9,559 51	25,438 86	2,243 64	3,915 09	7,362 97
Total.....	102,850 63	115,812 07	18,358 26	21,822 53	16,757 27
Percentage of Net Debt to Total Assets	79.6	65.2	34.5	29.0	19.3

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Waterford		Waterloo		Watford		Welland	
985		5,476		1,075		9,135	
1920		1919		1920		1919	
\$ c.		\$ c.		\$ c.		\$ c.	
		5,142 20		5,142 20		27,364 40	
		24,643 38		62,075 00		45,915 70	
6,941 98		41,313 47		7,295 99		75,103 62	
2,312 66		12,855 15		1,844 67		1,881 90	
2,552 14		13,967 81		2,108 43		2,339 48	
590 10		5,254 13		509 05		509 05	
						3,255 31	
366 02		2,242 27		1,305 70		1,305 70	
		2,483 64				10,429 43	
607 69		9,633 65		657 44		657 44	
13,370 59		117,535 70		13,721 28		14,112 37	
						201,116 95	
1,355 83		4,164 62		1,286 36		1,867 72	
						2,389 98	
115 24		4,285 16				32,896 85	
		4,624 33		4 35		15 82	
		2,880 00				8,263 90	
		3,912 57				15,086 97	
		352 68					
3,426 30		8,763 88				2,847 10	
						4,107 17	
						9,448 82	
18,267 96		146,518 94		15,011 99		15,995 91	
						276,157 79	
18,267 96		146,518 94		15,011 99		15,995 91	
						276,157 79	
1,285 86		58,283 56		8,754 66		8,399 37	
379 22		1,959 33		26 19			
						165,000 00	
236 55						42,020 87	
						4,107 17	
1,901 63		60,242 89		12,448 20		11,581 03	
						211,128 04	
6,459 67		7,716 44		958 55		1,313 84	
		2,880 00					
		3,912 57				15,086 97	
		352 68					
1,667 00		30,471 29		904 00		1,418 00	
						35,088 00	
8,126 67		45,332 98		1,862 55		2,731 84	
8,239 66		40,943 07		701 24		1,683 04	
						53,022 07	
						12,007 68	
18,267 96		146,518 94		15,011 99		15,995 91	
						276,157 79	
10. 4		41. 1		82. 8		72. 4	
						77. 7	
						73. 1	

STATEMENT
Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Continued

Municipality Population	Wellesley P.V.		West Lorne 700		Waterloo Township
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings					
Sub-Station Equipment					
Distribution System, Overhead	4,172 83	4,311 51	5,239 72	6,095 41	334 38
Dist. System, Underground					
Line Transformers	1,311 47	1,311 47	543 69	2,531 61	1,015 13
Meters	1,034 49	1,190 29	1,233 93	1,610 83	355 49
Street Light Equipment, Regular	386 55	386 55	566 10	566 10	
Street Light Equip., Ornamental					
Miscellaneous Construction Exp.	93 57	128 57	199 49	199 49	33 88
Steam or Hydraulic Plant					
Old Plant			1,250 00	1,250 00	
Total Plant	6,998 91	7,328 39	9,032 93	12,253 44	1,738 88
Bank and Cash Balance	2,295 81	2,579 48	1,222 36	925 48	
Securities and Investments					
Accounts Receivable			115 88		
Inventories				48 24	
Sinking Fund on Local Debenture's					
Equity in Hydro System					
Equity in Rural Lines					
Other Assets			160 00	160 00	
H.E.P.C. Operating Account	1,074 97	1,360 84	381 82	1,556 57	
Total Assets	10,369 69	11,268 71	10,912 99	14,943 73	1,738 88
Deficit					
Total	10,369 69	11,268 71	10,912 99	14,943 73	1,738 88
LIABILITIES					
Debenture Balance	6,850 93	6,608 11	7,677 86	7,557 32	
Accounts Payable			598 37	713 53	1,738 88
Bank Overdraft					
Other Liabilities					
H.E.P.C. Operating Account					
Total Liabilities	6,850 93	6,608 11	8,276 23	8,270 85	1,738 88
RESERVES					
Debentures Paid	649 07	891 89	322 14	442 68	
Sinking Fund Reserve					
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines					
Depreciation Reserve	861 00	1,187 00	596 00	988 00	
Total Reserves	1,510 07	2,078 89	918 14	1,430 68	
Surplus	2,008 69	2,581 71	1,718 62	5,242 20	
Total	10,369 69	11,268 71	10,912 99	14,943 73	1,738 88
Percentage of Net Debt to Total Assets	66.1	58.6	75.8	55.3	100.0

“A” Continued

of Hydro Municipalities as at December 31st, 1920

Waterloo Township	Weston 2,495		Windsor 31,629		Wood- bridge 600	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	3,230 94	3,230 94	10,141 60	13,456 88	.....	.....
.....	11,889 20	11,889 20	30,004 67	57,095 41	.....	.....
334 38	16,145 72	19,002 76	139,974 43	249,770 20	7,042 50	7,284 91
.....
1,015 13	11,536 50	14,523 78	40,332 99	99,858 47	2,633 68	2,633 68
35 49	6,765 03	8,332 60	70,278 38	105,864 63	1,502 32	1,811 44
.....	2,020 66	2,189 53	12,071 24	12,404 28	326 31	343 56
.....	.....	.....	217,877 30	219,399 18	.....	.....
33 88	3,715 09	3,642 09	57,733 35	17,369 14	642 82	642 82
.....	.....	.....	.....	122,341 54	.....	.....
.....	.....	.....	.....	48,048 77	.....	.....
.....
1,738 88	55,303 14	62,810 90	578,413 96	945,608 50	12,147 63	12,716 41
.....	.....	.....	719 64	75 00	750 32	4,256 14
.....	.....	.....	.....	.....	500 00	500 00
.....	1,478 99	788 08	45,866 85	114,383 28	2,211 11	747 02
.....	351 08	92 07	30,878 19	88,163 91	26 10	4 60
.....	.....	.....	14,818 76	21,149 16	.....	.....
.....	3,591 93	5,205 09	.....	10,485 14	.....	302 32
.....	.....	707 87	567 19	688 77	.....	.....
.....	.....	.....	3,200 00	1,600 00	.....	.....
.....	8,864 39	10,116 71	.....	3,872 23	244 68	183 31
.....
1,738 88	69,589 53	79,720 72	674,464 59	1,186,025 99	15,879 84	18,709 80
.....
1,738 88	69,589 53	79,720 72	674,464 59	1,186,025 99	15,879 84	18,709 80
.....
.....	14,063 94	13,697 02	329,130 35	661,427 40	7,990 44	7,845 08
.....	4,445 01	.....	30,876 69	69,054 37	147 77	.....
.....	697 38	1,237 77	.....	30,499 79	.....	.....
.....	.....	.....	216,879 92	216,879 92	.....	.....
.....	.....	.....	11,127 54	.....	.....	.....
.....
1,738 88	19,206 33	14,934 79	588,014 50	977,861 46	8,138 21	7,845 08
.....
.....	5,903 94	6,270 86	20,869 68	28,572 63	509 53	654 89
.....	.....	.....	14,818 76	21,149 16	.....	.....
.....	3,591 93	5,205 09	.....	10,485 14	.....	302 32
.....	.....	707 87	567 19	688 77	.....	.....
.....	14,006 00	17,062 00	38,840 74	54,611 74	1,959 01	2,589 01
.....
.....	23,501 87	29,245 82	75,096 37	115,507 44	2,468 54	3,546 22
.....	26,881 33	35,540 11	11,353 72	92,657 09	5,273 09	7,318 50
.....
1,738 88	69,589 53	79,720 72	674,464 59	1,186,025 99	15,879 84	18,709 80
.....
100.0	27.6	20.0	87.2	83.1	51.2	42.6

STATEMENT

Comparative Balance Sheets of Electric Departments

NIAGARA
SYSTEM—Concluded

Municipality	Woodstock		Wyoming		York
Population	10,126		495		Township
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.	17,178 25	27,391 70			
Sub-Station Equipment.	36,338 58	36,909 11			
Distribution System, Overhead.	49,725 90	57,046 70	5,424 53	5,724 26	125,369, 10
Dist. System, Underground.					
Line Transformers.	24,782 85	28,027 29	660 84	1,012 00	1,488 37
Meters.	23,584 73	27,796 98	722 56	840 98	
Street Light Equipment, Regular.	10,450 67	10,512 42	262 32	262 32	1,344 53
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp.	15,989 29	16,268 60	735 00	735 00	1,394 11
Steam or Hydraulic Plant.	14,908 62	14,908 62			
Old Plant.					
Total Plant.	192,958 89	218,861 2	7,805 25	8,574 56	129,596 11
Bank and Cash Balance.		1,424 10			
Securities and Investments.	40,000 00	35,000 00			
Accounts Receivable.				960 00	1,080 37
Inventories.	769 56	3,734 39			
Sinking Fund on Local Debentures.	53,024 57	27,579 00			
Equity in Hydro System.	4,640 61	6,597 70			
Equity in Rural Lines.		139 02			
Other Assets.			21 48		
H.E.P.C. Operating Account.	19,020 65	18,393 61			
Total Assets.	310,414 28	311,729 24	7,826 73	9,534 56	130,676 48
Deficit.			2,094 14	1,771 49	
Total.	310,414 28	311,729 24	9,920 87	11,306 05	130,676 48
LIABILITIES					
Debenture Balance.	107,385 63	77,385 63	5,690 52	5,459 58	
Accounts Payable.	12,000 00		316 96	1,543 92	130,676 48
Bank Overdraft.	6,622 19	30,500 00	112 24	118 90	
Other Liabilities.	78 75				
H.E.P.C. Operating Account.			2,107 67	1,915 17	
Total Liabilities.	126,086 57	107,885 63	8,227 39	9,037 63	130,676 48
RESERVES					
Debentures Paid.		30,000 00	809 48	1,040 42	
Sinking Fund Reserve.	53,024 57	27,579 00			
Reserve for Equity in Hydro Sys.	4,640 61	6,597 70			
Reserve for Equity in Rural Lines.		139 02			
Depreciation Reserve.	41,795 25	47,675 25	884 00	1,228 00	
Total Reserves.	99,460 43	111,990 97	1,693 48	2,268 42	
Surplus.	84,867 28	91,852 64			
Total.	310,414 28	311,729 24	9,920 87	11,306 08	130,676 48
Percentage of Net Debt to Total Assets	40.6	35.3	82.9	94.7	100.



“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Port Colborne	Zurich P.V.		NIAGARA SYSTEM SUMMARY	
1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	.....	.....	1,709,288 61	1,876,408 12
.....	.....	.....	2,726,174 83	3,015,703 68
25,401 31	3,624 11	3,639 76	6,131,871 17	6,919,995 01
.....	.....	.....	1,082,037 59	1,183,917 35
4,181 67	991 96	991 96	1,707,935 63	2,101,465 93
6,113 22	1,001 16	1,047 41	2,144,083 24	2,499,611 40
211 12	395 77	395 77	1,064,380 08	1,088,187 72
.....	.....	.....	467,220 51	478,425 26
4,247 13	273 30	273 30	2,316,721 85	2,460,879 41
.....	.....	.....	97,903 59	228,804 33
9,929 60	150 00	150 00	539,846 21	562,946 83
50,084 05	6,436 30	6,498 20	19,987,463 31	22,416,345 04
235 00	1,319 37	2,474 77	377,126 43	873,481 38
.....	.....	.....	533,111 92	221,850 11
272 40	2 95	.....	997,777 64	1,237,283 59
418 26	.....	.....	883,723 31	1,182,496 59
.....	.....	.....	1,446,177 73	1,703,339 59
.....	.....	.....	314,415 34	478,946 91
.....	.....	.....	24,524 74	45,934 92
.....	.....	.....	20,932 83	22,739 21
121 01	1,293 02	1,662 50	496,972 18	517,198 74
51,130 72	9,051 64	10,635 47	25,082,225 43	28,699,616 08
.....	.....	.....	41,300 79	.....
51,130 72	9,051 64	10,635 47	25,123,526 22	28,699,616 08
38,852 83	5,509 15	5,422 07	15,161,106 66	16,267,060 36
5,723 64	.....	.....	899,823 49	1,177,193 91
4,195 56	.....	.....	307,996 85	347,580 76
235 00	.....	.....	659,779 66	623,012 67
.....	.....	.....	114,357 33	221,144 92
49,007 03	5,509 15	5,422 07	17,143,063 99	18,635,992 62
1,147 17	82 46	169 54	823,427 33	1,062,404 70
.....	.....	.....	1,455,561 25	1,703,339 59
.....	.....	.....	314,415 32	478,946 91
.....	.....	.....	24,524 74	45,934 92
.....	470 00	732 00	3,145,035 66	4,064,059 44
1,147 17	552 46	901 54	5,762,964 30	7,354,685 56
976 52	2,990 03	4,311 86	2,217,497 93	2,708,937 90
51,130 72	9,051 64	10,635 47	25,123,526 22	28,699,616 08
58.9	60.9	50.9	68.3	65.0

STATEMENT

Comparative Balance Sheets of Electric Departments

SEVERN
SYSTEM

Municipality	Alliston		Barrie		Beeton
Population	1,224		6,775		492
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.			12,266 06	12,266 06	
Sub-Station Equipment.....	675 73	675 73	4,682 98	4,682 98	428 50
Distribution System, Overhead....	19,415 08	20,368 03	25,774 74	29,123 17	10,074 22
Dist. System, Underground.					
Line Transformers.....	3,549 64	4,315 15	5,746 95	7,096 90	1,552 24
Meters.....	3,951 36	4,389 87	18,442 69	20,969 54	417 20
Street Light Equipment, Regular...	1,292 72	1,330 21	3,357 02	3,357 02	913 98
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp...	2,856 02	2,856 02	1,132 49	1,153 73	1,432 19
Steam or Hydraulic Plant					
Old Plant.....	8,283 10	8,079 10	44,631 31	44,609 11	
Total Plant.....	40,023 65	42,014 11	116,034 24	123,258 51	14,818 33
Bank and Cash Balance.....		2,441 73	4,193 25	3,118 57	135 60
Securities and Investments.....			27,000 00	33,000 00	
Accounts Receivable.....		392 20	8,934 08	7,787 13	2,223 09
Inventories.....			2,418 27	1,561 52	
Sinking Fund on Local Debentu's..	775 02	1,212 62			
Equity in Hydro System.....			1,307 78	2,737 75	
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....			11,391 55	11,823 78	
Total Assets.....	40,798 67	46,060 66	171,279 17	183,287 26	17,177 02
Deficit.....	5,243 12	5,982 04			4,299 01
Total.....	46,041 79	52,042 70	171,279 17	183,287 26	21,476 03
LIABILITIES					
Debenture Balance.....	32,000 00	40,000 00	34,449 80	32,545 81	14,774 23
Accounts Payable.....	7,041 40	1,662 62	1,914 48	2,283 75	1,973 87
Bank Overdraft.....	547 10				
Other Liabilities.....			579 94	350 00	
H.E.P.C. Operating Account.....	4,278 27	6,468 46			3,967 16
Total Liabilities.....	43,866 77	48,131 08	36,944 22	35,179 56	20,715 26
RESERVES					
Debentures Paid.....			52,550 20	54,454 19	225 77
Sinking Fund Reserve.....	775 02	1,212 62			
Reserve for Equity in Hydro Sys...			1,307 78	2,737 75	
Reserve for Equity in Rural Lines...					
Depreciation Reserve.....	1,400 00	2,699 00	19,797 48	23,503 51	535 00
Total Reserves.....	2,175 02	3,911 62	73,655 46	80,695 45	760 77
Surplus.....			60,679 49	67,412 25	
Total.....	46,041 79	52,042 70	171,279 17	183,287 26	21,476 03
Percentage of Net Debt to Total Assets	95.3	104.5	21.6	19.5	121.2

“A”—Continued
of Hydro Municipalities as at December 31 st, 1920

Beeton	Bradford		Coldwater		Collingwood	
492	866		584		7,262	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
428 50		388 50	275 00	275 00	4,343 60	4,343 60
10,104 76	13,632 07	13,866 48	5,784 39	5,857 20	11,335 31	11,212 59
1,674 96	1,484 21	1,195 71	1,206 07	2,129 32	33,245 21	35,201 37
785 20	1,222 35	1,449 41	1,347 75	1,446 84		10,552 96
913,98	544 95	544 95	354 20	354 20	9,752 57	16,581 34
1,432 19	1,691 36	1,691 36	132 53	132 53	16,013 83	2,522 72
					2,400 25	5,351 60
					5,351 60	352 17
						352 17
15,339 59	18,574 94	19,136 41	9,099 94	10,195 09	82,794 54	86,118 35
44 14		75 97	2,362 89	2,502 33	3,137 26	3,291 74
1,510 07	56 92		782 84	583 45	5,000 00	5,000 00
		308 02	19 87	19 87	4,105 00	5,380 08
			212 41	425 27	324 50	179 93
					3,876 03	9,009 37
					16,028 72	5,602 29
16,893 80	18,631 86	19,520 41	12,477 95	13,726 01	115,266 05	114,581 76
6,341 52	4,064 52	7,843 22	843 47	386 16		
23,235 32	22,696 38	27,363 62	13,321 42	14,112 17	115,266 05	114,581 76
14,537 17	15,419 39	15,227 04	6,334 33	6,201 06	23,980 89	22,476 41
2,798 38	2,944 61	2,458 64	545 77	866 77	3,350 00	2,345 00
	48 00	1,750 00			618 29	676 87
4,324 94	3,498 77	6,225 98	2,887 24	2,647 13		
21,660 49	21,910 77	25,661 66	9,767 34	9,714 96	27,949 18	25,498 28
462 83	180 61	372 96	665 67	798 94	15,429 4	16,933 88
			212 41	425 27	3,876 03	9,009 37
1,112 00	605 00	1,329 00	2,676 00	3,173 00	18,183 00	21,465 05
1,574 83	785 61	1,701 96	3,554 08	4,397 21	37,488 43	47,408 30
					49,828 44	41,675 18
23,235 32	22,696 38	27,363 62	13,321 42	14,112 17	115,266 05	114,581 76
128.2	117.6	131.5	78.3	73.0	24.2	24.1

STATEMENT

Comparative Balance Sheets of Electric Departments

SEVERN
SYSTEM—Continued

Municipality Population	Cookstown P.V.		Creemore 615		Elmvale P.V.
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.	60 00	60 00			106 25
Sub-Station Equipment.....	392 95	392 95			
Distribution System, Overhead....	8,255 83	8,301 93	4,709 83	4,828 20	6,566 78
Dist. System, Underground.....					
Line Transformers.....	1,443 43	1,624 33	872 91	1,026 81	2,052 50
Meters.....	933 68	1,034 90	1,116 03	1,446 90	1,601 28
Street Light Equipment, Regular...	514 21	514 21	272 07	272 07	317 98
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp...	1,453 55	1,453 55	185 41	185 41	455 93
Steam or Hydraulic Plant.....					
Old Plant.....			2,651 15	2,651 15	
Total Plant.....	13,053 65	13,381 87	9,807 40	10,410 54	11,100 72
Bank and Cash Balance.....	414 39	690 97		1,485 67	304 77
Securities and Investments.....					
Accounts Receivable.....	6 57	295 56	1,119 13	146 68	105 00
Inventories.....	10 00		52 44	113 11	458 80
Sinking Fund on Local Debentu's.					
Equity in Hydro System.....				394 12	224 70
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....			2,398 60	2,068 98	132 05
Total Assets.....	13,484 61	14,368 40	13,377 57	14,619 10	12,326 04
Deficit.....	1,681 55	2,205 11			
Total.....	15,166 16	16,573 51	13,377 57	14,619 10	12,326 04
LIABILITIES					
Debenture Balance.....	9,272 89	9,147 15	5,503 97	5,267 52	6,142 15
Accounts Payable.....	3,543 05	4,097 75	292 50	282 81	128 62
Bank Overdraft.....		434 00	237 60		
Other Liabilities.....					
H.E.P.C. Operating Account.....	1,667 11	1,599 76			
Total Liabilities.....	14,483 05	15,278 66	6,034 07	5,550 33	6,270 77
RESERVES					
Debentures Paid.....	227 12	352 85	996 03	1,232 48	857 85
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys...				394 12	224 70
Reserve for Equity in Rural Lines...					
Depreciation Reserve.....	456 00	942 00	1,390 00	1,748 00	2,237 00
Total Reserves.....	683 11	1,294 85	2,386 03	3,374 60	3,319 55
Surplus.....			4,957 47	5,694 17	2,735 72
Total.....	15,166 16	16,573 51	13,377 57	14,619 10	12,326 04
Percentage of Net Debt to Total Assets	107. 4	106. 3	45. 1	39. 0	50. 2

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Elmvale P.V.	Midland 7,339		Penetanguishene 3,664		Port McNicoll 564	
1920	1919	1920	1919	1920	1919	1920
\$ c. 106 25	\$ c. 22,469 21	\$ c. 10,864 80	\$ c. 2,151 00	\$ c. 2,151 00	\$ c. 202 60	\$ c. 202 60
6,588 39	10,879 17	19,026 49	3,507 71	3,507 71	4,158 55	5,247 88
2,203 94	53,910 28	62,651 70	29,263 94	31,740 80	339 98	339 98
1,742 51	12,515 20	13,673 99	8,195 47	9,157 31	868 84	1,119 26
317 98	17,293 73	19,176 52	6,549 36	8,196 41	166 73	166 73
455 93	4,180 03	4,486 88	1,990 87	2,152 95	396 44	396 44
	3,500 58	6,546 08	822 47	822 47		
	15,415 62	15,415 62	2,874 20	2,374 20		
	853 00					
11,415 00	141,016 82	151,842 08	55,354 82	60,102 85	6,133 14	7,472 89
311 63		562 89			141 29	2 71
105 00	208 76		1,124 75	1,616 00		
137 25	5,539 38	6,832 27	1,046 30	1,330 76	26 72	25 67
588 24	1,858 63	4,775 81	4,681 11	7,707 60		100 61
672 37	840 37		510 85	3,174 99		
13,229 49	149,463 96	164,013 05	62,717 83	73,932 20	6,301 15	7,601 88
					1,967 04	2,491 47
13,229 49	149,463 96	164,013 05	62,717 83	73,932 20	8,268 19	10,093 35
5,993 90	29,739 33	56,494 79	25,237 66	24,409 72	4,405 39	4,233 79
	32,031 60	11,586 30	3,500 00	8,500 00	299 17	2,662 03
	1,411 68		677 46	1,093 90		
	14,099 56	13,350 66			2,237 02	1,438 71
5,993 90	77,282 17	81,431 75	29,415 12	34,003 62	6,941 58	8,334 53
1,006 10	24,010 67	25,575 20	5,762 34	6,590 28	594 61	766 21
588 24	1,858 63	4,775 81	4,681 11	7,707 60		100 61
2,760 00	21,009 00	26,156 95	14,528 00	16,958 48	732 00	892 00
4,354 34	46,878 30	56,507 96	24,971 45	31,256 36	1,326 61	1,758 82
2,881 15	25,303 49	26,073 34	8,331 26	8,672 22		
13,229 49	149,463 96	164,013 05	62,717 83	73,932 20	8,268 19	10,093 35
47.4	51.7	51.1	50.0	51.4	110.2	111.1

STATEMENT
Comparative Balance Sheets of Electric Departments

SEVERN
SYSTEM—Continued

Municipality Population	Stayner 870		Thorton P.V.		Totten- ham 475
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....				336 54	
Sub-Station Equipment.....	200 00	200 00			358 50
Distribution System, Overhead....	7,983 23	8,254 96	5,827 49	5,890 19	7,127 19
Dist. System, Underground.....					
Line Transformers.....	2,642 54	2,901 85	609 38	609 38	590 85
Meters.....	1,749 82	1,971 02	331 30	335 99	1,126 61
Street Light Equipment, Regular...	529 31	529 31	203 22	375 90	460 17
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp...	310 33	310 33	375 35	300 35	1,287 37
Steam or Hydraulic Plant.....					
Old Plant.....	4,132 41	4,132 41			847 20
Total Plant.....	17,547 64	18,299 88	7,346 74	7,848 35	11,797 89
Bank and Cash Balance.....		501 24	460 10		176 10
Securities and Investments.....					
Accounts Receivable.....	33 82				
Inventories.....		211 93			
Sinking Fund on Local Debentures.					
Equity in Hydro System.....	224 52	554 31			
Equity in Rural Lines.....					
Other Assets.....					
H.E.P.C. Operating Account.....	9 19	160 73			
Total Assets.....	17,815 17	19,728 09	7,806 84	7,848 35	11,973 99
Deficit.....			1,293 06	2,146 25	2,420 14
Total.....	17,815 17	19,728 09	9,099 90	9,994 60	14,394 13
LIABILITIES					
Debenture Balance.....	11,861 10	11,352 16		7,377 66	9,947 47
Accounts Payable.....	419 08	166 14	7,935 20	602 23	1,430 62
Bank Overdraft.....	452 94				
Other Liabilities.....	32 03			85 00	
H.E.P.C. Operating Account.....			885 70	1,229 37	2,110 41
Total Liabilities.....	12,765 15	11,518 30	8,820 90	9,294 26	13,488 50
RESERVES					
Debentures Paid.....	2,138 90	2,647 84		122 34	519 63
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys...	224 52	554 31			
Reserve for Equity in Rural Lines...					
Depreciation Reserve.....	2,168 42	2,809 42	279 00	578 00	386 00
Total Reserves.....	4,531 84	6,011 57	279 00	700 34	905 63
Surplus.....	518 18	2,198 22			
Total.....	17,815 17	19,728 09	9,099 90	9,994 60	14,394 13
Percentage of Net Debt to Total Assets	71.1	60.0	113.0	118.4	112.6

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Tottenham 475	Victoria Harbor 1,496	Waubauskene P.V.	SEVERN SYSTEM SUMMARY
1920	1919	1920	1919
\$ c.	\$ c.	\$ c.	\$ c.
358 50			41,873 72
7,202 69	4,902 84	4,936 21	32,460 85
			243,429 40
845 64	716 22	825 92	53,686 72
1,130 21	1,525 54	1,570 94	60,590 71
460 17	145 69	145 69	84,206 43
			17,802 62
1,287 37	642 64	642 64	18,604 19
361 45			22,283 92
			25,275 66
11,646 03	7,932 93	8,121 40	80,039 96
			77,975 21
373 69	1,057 78	427 67	
			566,928 13
			601,093 69
			12,501 47
			16,164 78
			32,000 00
			38,000 00
			110 00
			18,809 96
			17,926 17
			4 53
			9,900 81
			10,724 86
			775 02
			1,212 62
			12,385 18
			26,526 71
			840 37
			30,666 21
			23,961 91
12,019 72	9,185 96	9,160 05	
4 491 90			684 807 15
			735 610 74
			21,811 91
			31,887 67
16,511 62	9,185 96	9,160 06	
			5,020 51
			706,619 06
			767,498 41
9,405 64	5,690 56	5,459 63	
2,074 00		220 00	237,842 93
			273,093 10
			67,349 97
			42,692 67
			3,374 78
			3,277 90
3,403 08			1,230 26
			1,111 87
			35,767 80
			40,713 72
14,882 72	5,690 56	5,679 63	
			3,075 53
			345,565 74
			360 889,26
1,061 46	809 44	1,040 37	
			536 35
			105,384 46
			131,954 28
			775 02
			1,212 62
			81 41
			12,385 18
			26,526 71
567 44	1,052 00	1,218 89	
			715 00
			88,044 90
			108,627 74
1,628 90	1,861 44	2,411 48	
	1,633 96	1,027 23	1,332 76
		475 75	612 22
			206,589 56
			154,463 76
			250,321 35
			156,287 80
16,511 62	9,185 96	9,160 06	
			4,723 31
			5,020 51
			706,619 06
			767,498 41
123.8		63.	
		68.1	
		62.2	
		50.4	
		50.9	

STATEMENT
Comparative Balance Sheets of Electric Departments

ST. LAWRENCE
SYSTEM

Municipality	Brockville		Chesterville		Prescott
Population	9,326		925		2,660
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....	27,994 53	27,994 53	250 00	250 00	2,761 54
Sub-Station Equipment.....					
Distribution System, Overhead....	51,743 62	57,658 98	5,546 08	5,723 96	25,932 60
Dist. System, Underground.....					
Line Transformers.....	15,549 84	18,688 90	1,930 73	1,930 73	6,412 75
Meters.....	18,301 48	21,472 16	1,766 71	2,094 84	8,344 53
Street Light Equipment, Regular...	14,386 83	14,651 81	318 22	318 22	1,426 91
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp...	4,259 65	4,759 65	610 68	610 68	1,250 89
Steam or Hydraulic Plant.....					
Old Plant.....	53,436 18	53,445 98			12,108 35
Total Plant.....	185,672 13	198,672 01	10,422 42	10,928 42	58,237 57
Bank and Cash Balance.....	200 00	200 00	1,539 29		3,200 73
Securities and Investments.....					
	17,913 32	21,968 41	418 15	1,448 94	661 46
Accounts Receivable.....	3,877 21	4,330 27	1,120 21	1,408 45	
Inventories.....	36,596 03	42,467 29			1,346 85
Sinking Fund on Local Debentu's..				1,232 00	
Equity in Hydro System.....					
Equity in Rural Lines.....	1,956 63	1,808 91			4,660 60
Other Assets.....					
H.E.P.C. Operating Account.....					
	246,215 32	269,446 89	13,500 07	15,017 82	68,107 21
Total Assets.....		7,201 77	6,179 98	6,124 44	
Deficit.....					
	246,215 32	276,648 66	19,680 05	21,142 26	68,107 21
Total.....					
LIABILITIES					
Debenture Balance.....	140,433 23	135,759 67	5,790 54	5,567 51	19,634 47
Accounts Payable.....	40,731 75	7,452 84	3,133 65	1,979 34	5,038 67
Bank Overdraft.....		51,378 20		163 29	
Other Liabilities.....					
H.E.P.C. Operating Account.....	10,606 71	14,321 99	8,166 40	8,897 63	2,438 17
Total Liabilities.....	191,771 69	208,912 70	17,090 59	16,607 77	27,110 71
RESERVES					
Debentures Paid.....	16,920 11	21,593 67	709 46	932 49	4,344 87
Sinking Fund Reserve.....	36,596 03	42,467 29			1,346 85
Reserve for Equity in Hydro Sys. ..				1,232 00	
Reserve for Equity in Rural Lines..					
Depreciation Reserve.....		3,675 00	1,880 00	2,370 00	10,929 00
Total Reserves	53,516 14	67,735 96	2,589 46	4,534 49	16,620 72
Surplus.....	927 49				24,375 78
Total.....	246,215 32	276,648 66	19,680 05	21,142 26	68,107 21
Percentage of Net Debt to Total Assets	77.9	77.2	126.6	120.4	39.6

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

Prescott 2,660	Williamsburg P.V.		Winchester 1,047		ST. LAWRENCE SUMMARY	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,761 54			224 15	224 15	31,230 22	31,230 22
26,658 19	1,597 74	1,597 74	7,213 78	7,380 70	92,033 82	99,019 57
6,932 93	297 89	297 89	665 86	989 01	24,857 07	28,839 46
8,957 51	583 77	583 77	1,955 16	2,216 91	30,951 65	35,325 19
1,490 28	74 41	74 41	564 98	564 98	16,771 35	17,099 70
1,346 73	4 00	4 00	343 94	343 94	6,469 16	7,065 00
12,108 35			1,100 00	1,100 00	66,644 53	66,654 33
60,255 53	2,557 81	2,557 81	12,067 87	12,819 69	268,957 80	285,233 47
1,549 96	1,164 10	1,337 75	1,159 68	1,233 06	7,263 80	4,320 77
6,759 70	296 94	309 94	243 67	290 33	19,533 54	30,777 32
8 30			3,482 51	2,934 10	8,479 93	8,681 12
1,724 91					37,942 88	44,192 20
930 00				560 76		2,722 76
					6,617 23	1,808 91
71,228 40	4,018 85	4,205 50	16,953 73	17,837 94	348,795 18	377,736 55
	615 85	665 37	887 73	1,895 15	7,683 56	15,886 73
71,228 40	4,634 70	4,870 87	17,841 46	19,733 09	356,478 74	393,623 28
18,831 73	2,290 42	2,184 26	9,889 91	9,710 52	178,038 57	172,053 69
4,009 35	105 44	51 93			49,008 91	13,493 46
						51,541 49
4,165 32	1,376 2	1,547 94	4,542 46	5,337 33	27,130 00	34,270 21
27,006 40	3,772 12	3,784 13	14,432 37	15,047 85	254,177 48	2 1,358 85
5,147 61	459 58	565 74	760 09	939 48	23,194 11	29,178 99
1,724 91					37,942 88	44,192 20
930 00				560 76		2,722 76
13,070 00	403 00	521 00	2,649 00	3,185 00	15,861 00	22,821 00
20,872 52	862 58	1086, 74	3,409 09	4,685 24	76,997 99	98,914 95
23,349 48					25,303 27	23,349 48
71,228 40	4,634 70	4,870 87	17,841 46	19,733 09	356,478 74	393,623 28
38.4	93.9	90.0	85.1	87.0	72.9	72.4

STATEMENT

Comparative Balance Sheets of Electric Departments

WASDELL'S
SYSTEM

Municipality Population	Beaverton 932		Breachin P.V.		Brock Township
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....	250 00	250 00			
Sub-Station Equipment.....					
Distribution System, Overhead....	6,635 39	8,050 98	1,496 59	1,496 59	680 77
Dist. System, Underground.....					
Line Transformers.....	1,276 68	2,236 28	1,149 20	1,149 20	1,351 28
Meters.....	2,263 40	2,569 49	371 77	371 77	637 01
Street Light Equipment, Regular...	453 44	453 44	69 89	69 89	
Street Light Equip., Ornamental...					
Miscellaneous Construction Exp....	2,085 67	2,085 67	266 26	266 26	46 65
Steam or Hydraulic Plant.....					
Old Plant.....	3,772 42	3,772 42			
Total Plant.....	16,737 00	19,418 28	3,353 71	3,353 71	2,715 71
Bank and Cash Balance.....	303 90	107 96	269 46	506 32	
Securities and Investments.....					
Accounts Receivable.....		242 00	693 55	180 05	274 52
Inventories.....	762 24	1,121 43	306 78	96 50	
Sinking Fund on Local Debentures.					
Equity in Hydro System.....		637 21		418 70	
Equity in Rural Lines.....	104 75	191 62	31 46	32 83	
Other Assets.....			8 97	72 32	
H.E.P.C. Operating Account.....					
Total Assets.....	17,907 89	21,718 50	4,663 93	4,660 43	2,990 23
Deficit.....	7,700 36	1,374 49	6,370 93	3,751 71	
Total.....	25,608 25	23,092 99	11,034 86	8,412 14	2,990 23
LIABILITIES					
Debenture Balance.....	13,776 22	13,474 52	1,636 74	1,604 84	
Account Payable.....		200 00	2,261 13	2,079 22	2,990 23
Bank Overdraft.....					
Other Liabilities.....					
H.E.P.C. Operating Account.....	9,013 50	5,036 16	6,621 27	3,622 39	
Total Liabilities.....	22,789 72	18,710 68	10,519 14	7,306 45	2,990 23
RESERVES					
Debentures Paid.....	1,223 78	1,525 48	113 26	145 16	
Sinking Fund Reserve.....					
Reserve for Equity in Hydro Sys....		637 21		418 70	
Reserve for Equity in Rural Lines...	104 75	191 62	31 46	32 83	
Depreciation Reserve.....	1,490 00	2,028 00	371 00	509 00	
Total Reserves.....	2,818 53	4,382 31	515 72	1,105 69	
Surplus.....					
Total.....	25,608 25	23,092 99	11,034 86	8,412 14	2,990 23
Percentage of Net Debt to Total Assets	127.3	86.1	225.5	156.8	100.0

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Brock Township	Kirkfield	Cannington		Sunderland		Woodville	
		818		P.V.		400	
		1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
	4,889 98	6,940 40	6,983 61	3,095 27	3,115 54	1,866 52	1,973 79
1,742 56	1,240 80	1,770 29	1,770 29	731 75	996 99	700 96	700 96
795 70	340 05	2,401 52	2,603 48	978 30	1,053 07	880 16	1,068 67
	354 11	533 48	533 48	220 97	226 25	127 31	127 31
61 74	301 53	506 58	506 58	142 22	142 22	251 91	251 91
		3,609 37	3,609 37	2,030 00	2,030 00	2,182 50	2,182 50
2,600 00	6,126 47	15,761 64	16,006 81	7,198 51	7,564 07	6,009 36	6,305 14
	485 89	1,227 16	912 04	708 77	144 56	415 30	195 27
		367 58	375 29	137 88		96 79	81 50
		714 36	705 60	26 54	59 99		
			598 17		519 25		482 94
							25 68
2,600 00	6,612 36	18,070 74	18,597 91	8,071 70	8,287 87	6,521 45	7,090 53
		9,446 95	5,024 90	8,030 04	5,432 62	7,597 28	3,994 25
2,600 00	6,612 36	27,517 69	23,622 81	16,101 74	13,720 49	14,118 73	11,084 78
2,525 43	6,000 00	14,075 45	13,777 37	6,205 46	6,049 52	5,150 09	5,034 62
	385 49	2,156 85	1,633 39		1,492 65	638 39	698 10
			931 60				
	121 21	8,576 84	4,065 25	7,596 14	3,982 47	7,428 34	3,656 06
2,525 43	6,506 70	24,809 14	19,476 01	14,733 20	11,524 64	13,216 82	9,388 78
74 57		924 55	1,222 63	594 54	750 48	349 91	465 38
			598 17		519 25		482 94
							25 68
		1,784 00	2,326 00	774 00	926 12	552 00	722 00
74 57		2,708 55	4,146 80	1,368 54	2,195 85	901 91	1,696 00
	105 66						
2,600 00	6,612 36	27,517 69	23,622 81	16,101 74	13,720 49	14,118 73	11,084 78
97. 1	98. 4	132. 3	104. 8	182. 5	139. 1	202. 7	132. 3

STATEMENT
Comparative Balance Sheets of Electric Departments

WASDELL'S SYSTEM—Continued		MUSKOKA SYSTEM			
Municipality	WASDELL'S		Gravenhurst		Huntsville
Population	SUMMARY		1,502		2,113
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.....	250 00	250 00	12,258 29	12,258 29	326 49
Sub-Station Equipment.....			12,030 88	12,030 88	647 30
Distribution System, Overhead..	20,714 94	26,510 49	26,678 37	26,779 25	8,111 59
Dist. System, Underground.....					
Line Transformers.....	6,980 16	8,837 08	1,133 74	1,133 74	1,670 41
Meters.....	7,532 16	8,802 23	4,032 07	4,379 01	4,925 66
Street Light Equipment, Regular	1,405 09	1,764 48	695 45	695 45	605 92
Street Light Equip., Ornamental.					
Miscellaneous Construction Exp.	3,299 29	3,615 91	1,542 00	1,542 00	259 92
Steam or Hydraulic Plant.....					
Old Plant.....	11,594 29	11,594 29		7,610 69	7,790 33
Total Plant.....	51,775 93	61,374 48	58,370 80	66,429 31	24,337 62
Bank and Cash Balance.....	2,924 59	2,352 04	2,136 26	3,099 35	
Securities and Investments.....					
Accounts Receivable.....	1,570 32	878 84	2,926 06	2,098 26	133 45
Inventories.....	1,809 92	1,983 52	1,629 97	2,142 43	1,837 95
Sinking Fund on Local Debentu's			4,227 22	2,470 13	
Equity in Hydro System.....		2,656 27			
Equity in Rural Lines.....	136 21	250 13			
Other Assets.....	8 97	72 32	52,686 28		
H.E.P.C. Operating Account....					
Total Assets.....	58,225 94	69,567 60	121,976 59	76,239 48	26,309 02
Deficit.....	39,145 56	19,577 97	6,951 91	8,944 17	7,412 39
Total.....	97,371 50	89,145 57	128,928 50	85,183 65	33,721 41
LIABILITIES					
Debenture Balance.....	40,843 96	48,466 30	87,653 19	39,926 97	18,666 22
Accounts Payable.....	8,046 60	6,488 85	2,663 18	2,752 69	1,948 64
Bank Overdraft.....	931 60				1,665 06
Other Liabilities.....			67 14		
H.E.P.C. Operating Account....	39,236 09	20,483 54	5,279 93	6,175 39	6,400 17
Total Liabilities.....	89,058 25	75,438 69	95,663 44	48,855 05	28,680 09
RESERVES					
Debentures Paid.....	3,206 04	4,183 70	22,318 00	24,041 47	2,467 32
Sinking Fund Reserve.....			3,300 06	2,470 13	
Reserve for Equity in Hydro Sys.		2,656 27			
Reserve for Equity in Rural Lines	136 21	250 13			
Depreciation Reserve.....	4,971 00	6,511 12	7,647 00	9,817 00	2,574 00
Total Reserves.....	8,313 25	13,601 22	33,265 06	36,328 60	5,041 32
Surplus.....		105 66			
Total.....	97,371 50	89,145 57	128,928 50	85,183 65	33,721 41
Percentage of Net Debt to Total Assets	153.0	108.4	78.4	64.1	109.0

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

			TRENT SYSTEM			
Huntsville 2,113	MUSKOKA SYSTEM SUMMARY		Bloomfield P.V.		Kingston 23,261	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
326 49	12,584 78	12,584 78	.....	.....	38,378 06	38,277 09
647 30	12,678 18	12,678 18	.....	.....	.....	.....
10,074 18	34,789 96	36,853 43	6,314 36	6,384 16	96,730 54	101,969 19
.....	.....	.....	.....	.....	44,742 00	44,747 10
2,895 50	2,804 15	4,029 24	1,119 31	1,119 31	26,403 95	29,680 89
4,897 38	8,957 73	9,276 39	846 92	1,248 28	46,151 02	54,855 99
1,036 50	1,301 37	1,731 95	426 15	426 15	17,224 93	18,699 67
.....	.....	.....	.....	.....	22,669 64	22,669 64
279 92	1,801 92	1,821 92	1,273 13	1,403 42	41,147 75	43,557 92
.....	.....	.....	.....	.....	85,017 02	77,393 70
5,436 20	7,790 33	13,046 89	.....	.....	14,575 47	22,298 11
.....
25,593 47	82,708 42	92,022 78	9,979 87	10,581 32	433,040 38	454,149 30
2,566 01	2,136 26	5,665 36	747 20	1,235 31	1,623 28	4,374 03
.....
130 67	3,059 51	2,228 93	426 87	88 44	26,084 85	19,436 31
2,956 82	3,467 92	5,099 25	.....	.....	23,971 36	15,251 80
.....	4,227 22	2,470 13	.....	.....	27,366 99	32,458 19
.....
.....
.....	52,686 28	.....	.....	.....	.....	.....
.....
31,246 97	148,285 61	107,486 45	11,153 94	11,905 07	512,086 86	525,669 63
6,560 32	14,364 30	15,504 49	196 64	240 82	.....	.....
.....
37,807 29	162,649 91	122,990 94	11,350 58	12,145 89	512,086 86	525,669 63
.....
.....
17,746 75	106,319 41	57,673 72	7,898 81	10,991 55	277,816 57	273,159 67
8,547 42	4,611 82	11,300 11	3,350 58	578 89	3,740 33	.....
.....	1,665 06	.....	.....	.....	.....	.....
.....	67 14	.....	.....	.....	.....	.....
4,668 33	11,680 10	10,843 72	.....	.....	.....	.....
.....
30,962 50	124,343 53	79,817 55	11,249 39	11,570 44	281,556 90	273,159 67
.....
.....
3,386 79	24,785 32	27,428 26	101 19	208 45	34,083 42	38,740 32
.....	3,300 06	2,470 13	.....	.....	27,366 99	32,458 19
.....
.....
3,458 00	10,221 00	13,275 00	.....	367 00	16,624 04	18,898 36
.....
6,844 79	38,306 38	43,173 39	101 19	575 45	78,074 45	90,096 87
.....	.....	.....	.....	.....	152,455 51	162,413 09
.....
37,807 29	162,649 91	122,990 94	11,350 58	12,145 89	512,086 86	525,669 63
.....
.....
99. 1	83. 8	74. 3	100. 8	97. 2	54. 9	51. 9

STATEMENT

Comparative Balance Sheets of Electric Departments

TRENT
SYSTEM—Continued

Municipality Population	Lakefield	Omemee 467		Peterboro
	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS				
Lands and Buildings.				8,241 19
Sub-Station Equipment.		360 32	360 32	7,777 37
Distribution System, Overhead.	14,934 17	8,125 80	8,575 83	89,639 32
Dist. System, Underground.				
Line Transformers.	1,169 42	626 34	644 50	36,877 02
Meters.	2,817 40	1,020 04	1,457 47	46,864 45
Street Ligh Equipment, Regular.	1,064 53	368 17	368 17	2,773 03
Street Light Equip., Ornamental.				26,107 68
Miscellaneous Construction Exp.	3,204 94	1,426 74	1,426 74	58,099 46
Steam or Hydraulic Plant.				
Old Plant.	5,500 00			17,435 71
Total Plant.	28,690 46	11,927 41	12,833 03	293,815 23
Bank and Cash Balance.	5,149 38	661 07	2 95	
Securities and Investments.				
Accounts Receivable.	727 53	65 00	150 68	6,068 66
Inventories.				5,002 56
Sinking Fund on Local Debentu's.				20,059 91
Equity in Hydro System.				
Equity in Rural Lines.				
Other Assets.				
H.E.P.C. Operating Account.				
Total Assets.	34,567 37	12,653 48	12,986 66	324,946 36
Deficit.		371 03	651 84	
Total.	34,567 37	13,024 51	13,638 50	324,946 36
LIABILITIES				
Debenture Balance.	33,500 00	11,495 97	11,139 49	220 000,00
Accounts Payable.	366 02	604 51	763 50	5,444 16
Bank Overdraft.				7,732 17
Other Liabilities.				4,389 21
H.E.P.C. Operating Account.				
Total Liabilities.	33,866 02	12,100 48	11,902 99	237,565 54
RESERVES				
Debentures Paid.		504 03	860 51	
Sinking Fund Reserve.				20,059 91
Reserve for Equity in Hydro Sys.				
Reserve for Equity in Rural Lines.				
Deprecia'ion Reserve.		420 00	875 00	34,018 00
Total Reserves.		924 03	1,735 51	54,077 91
Surplus.	701 35			33,302 91
Total.	34,567 37	13,024 51	13,638 05	324,946 36
Percentage of Net Debt to Total Assets	98.0	95.7	91.7	73.1

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Peterboro	Picton 3,257		Wellington 802		E. Whitby Township	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
8,241 19	1,292 00	1,292 00	200 00	200 00		
8,849 40	432 00	432 90				
96,486 77	6,111 51	9,121 40	8,618 82	9,222 01	461 18	704 50
50,217 13	2,037 24	3,698 99	1,509 38	1,991 58	2,459 31	2,459 31
50,445 29	1,922 61	4,848 14	324 38	1,723 01	787 22	787 22
3,374 46	998 00	998 00	76 69	796 02		
26,107 68						
57,669 99	2,633 00	2,633 00	717 28	717 28		48 97
17,435 71	4,792 00	3,739 98	3,000 00	2,477 92		
318,827 62	20,218 36	26,763 51	14,446 55	17,127 82	3,707 71	4,000 00
	4,483 21	3,626 45		372 38	113 49	
8,829 41	2,089 16	6,045 86			24 57	
7,761 21	3,222 66	8,117 13	149 15	232 29		
24,875 71						
	2,002 92					
360,293 95	32,016 31	44,552 95	14,595 70	17,732 49	3,845 77	4,000 00
				427 43	3,467 08	
360,293 95	32,016 31	44,552 95	14,595 70	18,159 92	7,312 85	4,000 00
220,000 00	864 82		9,884 22	9,760 91	4,000 00	3,775 96
13,193 65	2,545 82	2,832 58	2,538 77	7,604 92		
10,627 22			1,680 09			
6,535 84	1,111 37				2 50	
					3,144 75	
250,356 71	4,522 01	2,832 58	14,103 08	17,365 83	7,147 25	3,775 96
	831 56	1,696 38	115 78	239 09		224 04
24,875 71						
43,195 00	460 00	1,113 00		555 00	165 60	
68,070 71	1,291 56	2,809 38	115 78	794 09	165 60	224 04
41,866 53	26,202 74	38,910 99	376 84			
360 293,95	32,016 31	44,552 95	14,595 70	18,159 92	7,312 85	4,000 00
69. 5	14. 3	6. 4	96. 6	97. 9	185. 7	94. 4

STATEMENT

Comparative Balance Sheets of Electric Departments

TRENT SYSTEM					THUNDER BAY SYSTEM
Municipality	W. Whitby Township		TRENT SYSTEM SUMMARY		Pt. Arthur
Population					
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.			48,111 25	48,010 28	
Sub-Station Equipment.			8,569 69	9,641 72	
Distribution System, Overhead. .	8,540 32	9,207 42	224,914 46	256,605 45	
Dist. System, Underground.			44,742 00	44,747 10	
Line Transformers.	2,378 65	2,329 96	74,115 16	93,311 09	
Meters.	1,207 75	1,207 75	99,192 54	119,390 55	
Street Light Equipment, Regular	721 76	721 76	22,588 73	26,448 76	
Street Light Equip., Ornamental.			48,801 62	48,777 32	
Miscellaneous Construction Exp.	18 49	33 11	105,315 85	110,695 37	
Steam or Hydraulic Plant.			85,017 02	77,393 70	
Old Plant.			39,803 13	51,451 72	
Total Plant.	12,866 97	13,500 00	801,171 50	886,473 06	699,275 71
Bank and Cash Balance.	726 39		8,354 64	14,760 50	11,459 25
Securities and Investments.					30,964 61
Accounts Receivable.			34,759 11	35,278 23	225,683 33
Inventories.			32,345 73	31,362 43	21,142 39
Sinking Fund on Local Debentures			47,426 90	57,333 90	122,307 53
Equity in Hydro System.					17,610 42
Equity in Rural Lines.					
Other Assets.			2,002 92		837 27
H.E.P.C. Operating Account.			360 83		17,621 72
Total Assets.	13,593 36	13,500 00	926,421 63	1,025,208 12	1,146,902 23
Deficit.	1,895 62		5,930 37	1,320 09	
Total.	15,488 98	13,500 00	932,352 00	1,026,528 21	1,146,902 23
LIABILITIES					
Debenture Balance.	13,500 00	12,744 00	545,460 39	575,071 58	528,437 61
Accounts Payable.	546 07		18,770 24	25,339 56	29,339 56
Bank Overdraft.			10,581 28	10,627 22	
Other Liabilities.			5,503 08	6,535 84	3,671 76
H.E.P.C. Operating Account.	1,177 61		4,322 36		
Total Liabilities.	15,223 68	12,744 00	584,637 35	617,574 20	561,528 87
RESERVES					
Debentures Paid.		756 00	35,635 98	42,724 79	98,348 02
Sinking Fund Reserve.			47,426 90	57,333 90	122,307 53
Reserve for Equity in Hydro Sys.					17,610 42
Reserve for Equity in Rural Lines					
Depreciation Reserve.	265 30		51,996 16	65,003 36	35,499 83
Total Reserves.	265 30	756 00	135,059 04	165,062 05	273,765 80
Surplus.			212,655 61	243,891 96	311,607 56
Total.	15,488 98	13,500 00	932,352 00	1,026,528 21	1,146,902 23
Percentage of Net Debt to Total Assets	112. 0	94. 4	63. 1	60. 2	48. 9

“A”—Concluded

of Hydro Municipalities as at December 31st, 1920

EUGENIA SYSTEM						
Pt. Arthur	Arthur 1,027		Chatsworth 257		Chesley 1,703	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	.....	.....	65 00	65 00	.....	.....
222,376 32	14,646 58	14,959 42	3,613 75	3,653 92	595 98 16,416 55	595 98 16,784 13
.....
19,657 95	3,862 05	3,849 78	564 92	546 92	3,430 77	3,880 77
50,310 15	1,827 23	1,888 32	530 98	543 78	3,193 66	3,674 55
29,180 76	539 71	539 71	207 29	207 29	817 76	817 76
.....
11,179 53	245 82	245 82	385 90	385 90	3,086 66	3,086 66
380,274 19	.....	.....	.....	.....	.....	.....
.....	1,101 47	1,101 47	.....	.....	5,503 60	5,503 60
.....
712,978 90	22,222 86	22,584 52	5,349 84	5,402 81	33,044 98	34,343 45
.....
1,774 68	178 20	766 47	133 50	287 22	.....	.....
31,005 77	.....	.....	.....	.....	.....	.....
61,899 81	712 01	506 45	761 84	445 97	.....	.....
50,944 76	.....	5 00	.....	10 00	224 00	205 00
136,998 63	.....	.....	415 55	573 34	.....	.....
20,446 98	.....	.....	.....	.....	.....	.....
.....
826 63	.....	.....	.....	.....	.....	.....
28,578 18	.....	.....	.....	.....	.....	.....
.....
1,045,454 34	23,113 07	23,862 44	6,660 73	6,719 34	33,268 98	34,548 45
.....	7,615 14	13,450 93	934 06	1,655 36	3,801 72	5,670 32
.....
1,045,454 34	30,728 21	37,313 37	7,594 79	8,374 70	37,070 70	40,218 77
.....
520,149 52	20,395 98	20,094 12	5,400 00	5,361 94	24,471 59	23,486 57
11,622 96	2,081 34	3,641 48	86 50	12 00	631 98	148 98
.....	.....	.....	.....	.....	284 15	978 68
3,688 97	.....	.....	.....	.....	.....	.....
.....	5,515 87	9,613 89	1,103 74	1,579 36	5,973 57	7,799 11
.....
535,461 45	27,993 19	33,349 49	6,590 24	6,953 30	31,361 29	32,413 34
.....
110,833 02	604 02	905 88	.....	38 06	3,028 41	4,013 43
136,998 63	.....	.....	415 55	573 34	.....	.....
20,446 98	.....	.....	.....	.....	.....	.....
.....
48,219 64	2,131 00	3,058 00	589 00	810 00	2,681 00	3,792 00
.....
316,498 27	2,735 02	3,963 88	1,004 55	1,421 40	5,709 41	7,805 43
193,494 62	.....	.....	.....	.....	.....	.....
.....
1,045,454 34	30,728 21	37,313 37	7,594 79	8,374 70	37,070 70	40,218 77
.....
51.2	121.1	139.7	98.9	103.5	94.3	93.9

STATEMENT

Comparative Balance Sheets of Electric Departments

EUGENIA
SYSTEM—Continued

Municipality Population	Derby Township		Dundalk 700		Durham 1,500
	1919	1920	1919	1920	1919
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS					
Lands and Buildings.					
Sub-Station Equipment					584 88
Distribution System, Overhead.	90 41	90 41	5,327 23	5,743 43	12,530 95
Dist. System, Underground.					
Line Transformers.	73 32	73 32	1,404 81	1,404 81	1,720 42
Meters	32 05	32 05	953 09	953 09	1,531 46
Street Light Equipment, Regular			510 82	510 82	708 06
Street Light Equip., Ornamental					
Miscellaneous Construction Exp.	14 68	14 68	228 69	228 69	547 24
Steam or Hydraulic Plant					
Old Plant.			380 94	380 94	1,506 51
Total Plant.	210 46	210 46	8,805 58	9,221 78	19,129 52
Bank and Cash Balance.				279 15	55 16
Securities and Investments.			1,000 00	1,000 00	
Accounts Receivable.					12 00
Sinking Fund Reserve.			341 04	220 09	
Sinking Fund on Local Debentu's.					
Equity in Hydro System					
Equity in Rural Lines.					
Other Assets.					
H.E.P.C. Operating Account.					
Total Assets.	210 46	210 46	10,146 62	10,721 02	19,196 68
Deficit.			180 36	733 48	4,671 89
Total.	210 46	210 46	10,326 98	11,454 50	23,868 57
LIABILITIES					
Debenture Balance			4,379 11	4,201 46	16,021 30
Accounts Payable.	210 46	210 46			1,569 31
Bank Overdraft.			132 18		
Other Liabilities.					
H.E.P.C. Operating Account.			2,617 90	3,810 77	2,238 26
Total Liabilities.	210 46	210 46	7,129 19	8,012 23	19,828 87
RESERVES					
Debentures Paid.			1,957 79	2,135 44	1,978 70
Sinking Fund Reserve.					
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines.					
Depreciation Reserve.			1,240 00	1,306 83	2,061 00
Total Reserves.			3,197 79	3,442 27	4,039 70
Surplus.					
Total.	210 46	210 46	10,326 98	11,454 50	23,868 57
Percentage of Net Debt to Total Assets.	100. 0	100. 0	72. 6	74. 7	103. 3

“A”—Continued

of Hydro Municipalities as at December 31st, 1920

Durham	Elmwood		Flesherton		Grand Valley	
1,500	P.V.		378		558	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
					36 50	36 50
584 88						
14,468 06	4,604 38	4,625 34	4,384 59	4,464 40	7,989 31	8,658 20
4,173 65	803 88	803 88	759 83	759 83	711 05	711 05
2,269 11	532 76	556 39	539 99	664 49	951 97	1,260 48
846 90	255 71	255 71	384 61	384 61	458 21	458 21
547 24	1,093 62	1,093 62	869 12	869 12	202 70	202 70
1,50 51					919 85	919 85
24,393 35	7,290 35	7,334 94	6,938 14	7,142 45	11,269 59	12,246 99
1,475 67		38 58	405 88	1,329 10	557 00	817 10
490 00	123 95	67 71	535 60		50 19	26 93
			254 88		30 60	17 00
	57 12	80 64				
				26 30		
26,362 02	7,471 42	7,521 87	8,134 50	8,497 85	11,907 38	13,108 02
4,583 41	740 38	1,695 12	1,653 99	2,373 38	1,264 71	2,351 55
30,945 43	8,211 80	9,216 99	9,788 49	10,871 23	13,172 09	15,459 57
15,413 25	6,815 54	6,615 78	5,143 19	6,242 57	10,048 01	9,691 86
214 90	240 63	367 36	1,907 93	751 95		305 00
	54 00					
2,799 53	417 05	1,066 99	1,414 56	2,127 98	942 09	2,451 57
25,427 68	7,527 22	8,050 13	8,465 68	9,122 50	10,990 10	12,448 43
2,586 75	384 46	584 22	356 81	457 43	951 99	1,308 14
	57 12	80 64				
				26 30		
2,931 00	243 00	502 00	966 00	1,265 00	1,230 00	1,703 00
5,517 75	634 58	1,166 86	1,322 81	1,74 73	2,181 99	3,011 14
30,945 43	8,211 80	9,216 99	9,788 49	10,871 23	13,172 09	15,459 57
96. 4	100. 8	107. 0	104. 1	107. 4	92. 2	95. 0

STATEMENT
Comparative Balance Sheets of Electric Departments

EUGENIA
SYSTEM

Municipality Population	Hanover 3,225		Holstein P.V.		Markdale 925
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.	64 80	64 80			
Sub-Station Equipment	1,124 76	1,124 76			780 80
Distribution System, Overhead.	35,716 56	40,848 51	1,876 69	1,911 30	6,924 04
Dist. System, Underground.					
Line Transformers.	5,821 11	10,809 98	698 58	455 22	1,808 14
Meters	6,119 41	9,376 46	236 58	255 84	1,422 05
Street Light Equipment, Regular	1,461 76	2,262 82	141 25	168 69	530 79
Street Light Equip., Ornamental					
Miscellaneous Construction Exp.	5,344 52	5,373 65	170 25	170 25	587 06
Steam or Hydraulic Plant					
Old Plant.	6,874 07	2,386 30			2,080 65
Total Plant.	62,526 99	72,247 28	3,123 35	2,961 30	14,133 53
Bank and Cash Balance	15 00	15 00	77 95	281 40	977 79
Securities and Investments.					
Accounts Receivable.	3,167 53	2,155 55	101 19	102 88	32 02
Inventories.	1,614 61	1,412 92	40 66	60 66	1,792 57
Sinking Fund on Local Debentu's.					
Equity in Hydro System					
Equity in Rural Lines.					
Other Assets.					
H.E.P.C. Operating Account.	2,809 53				
Total Assets.	70,133 66	75,830 75	3,343 15	3,406 24	16,935 91
Deficit.		5,509 61	2,952 98	3,895 96	
Total.	70,133 66	81,340 36	6,296 13	7,302 20	16,935 91
LIABILITIES					
Debenture Balance.	55,270 68	53,530 20	2,388 39	2,281 87	8,502 35
Accounts Payable.	4,181 06	10,701 50	704 51	677 75	3,656 60
Bank Overdraft.	1,346 16	4,227 25			
Other Liabilities					
H.E.P.C. Operating Account.		2,017 61	2,658 88	3,569 71	1,444 44
Total Liabilities.	60,797 90	70,476 56	5,751 78	6,529 33	13,603 39
RESERVES					
Debentures Paid.	2,729 32	4,469 80	373 66	480 18	497 65
Sinking Fund Reserve.					
Reserve for Equity in Hydro Sys.					
Reserve for Equity in Rural Lines.					
Depreciation Reserve.	3,858 00	6,394 00	170 69	292 69	1,267 00
Total Reserves.	6,587 32	10,863 80	544 35	772 87	1,764 65
Surplus.	2,748 44				1,567 87
Total.	70,133 66	81,340 36	6,296 13	7,302 20	16,935 91
Percentage of Net Debt to Total Assets	86. 7	92. 9	172. 6	-162. 5	80. 3

“A” —Continued.
of Hydro Municipalities as at December 31st, 1920

Markdale 925	Mt. Forest 1,716		Neustadt 412		Orangeville 2,173	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	3,725 00	3,725 00	.....	.....	2,400 00	2,400 00
780 80	686 75	686 75	.....	.....	1,169 00	1,169 00
7,017 60	15,238 95	15,819 42	8,147 17	8,946 44	20,697 82	21,163 87
.....
1,967 74	2,967 02	3,375 54	2,206 64	2,702 97	2,505 27	2,595 27
1,171 95	2,882 22	3,233 81	456 54	1,290 33	3,540 40	3,797 49
530 79	1,655 77	1,655 77	484 81	496 41	1,139 49	1,139 49
.....
587 06	1,796 02	1,796 02	954 75	1,495 88	3,313 08	3,331 69
.....
2,080 65	3,984 47	3,984 47	1,126 40	1,097 60	3,249 99	3,204 99
.....
14,682 59	32,936 20	34,276 78	13,376 31	16,029 63	38,105 05	38,801 80
.....
1,733 18	5,286 09	4,952 37	514 23	1,225 95	1,006 09	1,119 50
.....
155 86	486 33	20 00	568 56	1,597 00	52 09	33 35
2,440 01	3,441 18	1,520 90	79 25	455 99	918 75	753 05
.....
73 08	.....	.....	.....	.....	.....	.....
.....
.....
19,084 72	42,149 80	40,770 05	14,538 35	19,308 57	40,081 98	40,707 70
.....	6,311 29	10,912 39	1,659 03	4,177 60	6,222 89	9,436 05
.....
19,084 72	48,461 09	51,682 44	16,197 38	23,486 17	46,304 87	50,143 75
.....
.....
8,358 65	24,683 77	23,931 90	7,262 36	10,318 06	29,853 77	29,748 45
4,118 88	590 64	.....	7,317 83	9,210 72	4,586 29	3,163 04
.....
.....
1,911 97	13,284 85	15,987 84	832 53	2,321 45	5,384 08	8,283 21
.....
14,389 50	38,559 26	39,919 74	15,412 72	21,850 23	39,824 14	41,194 70
.....
.....
641 35	6,274 83	7,026 70	332 66	681 94	3,146 23	4,301 55
.....
.....
73 08	.....	.....	.....	.....	.....	.....
1,731 20	3,627 00	4,736 00	452 00	954 00	3,334 50	4,647 50
.....
2,445 63	9,901 83	11,762 70	784 66	1,635 94	6,480 73	8,949 05
2,249 59	.....	.....	.....	.....	.....	.....
.....
19,084 72	48,461 09	51,682 44	16,197 38	23,486 17	46,304 87	50,143 75
.....
.....
75. 4	91. 5	97. 9	106. 0	113. 2	99. 5	101. 2

STATEMENT
Comparative Balance Sheets of Electric Departments

EUGENIA
SYSTEM—Continued

Municipality Population	Owen Sound 11,768		Shelburne 970		Tara 520
	1919	1920	1919	1920	1919
ASSETS	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Lands and Buildings.....	28,473 74	28,953 74	800 00	800 00	.....
Sub-Station Equipment.....	7,526 18	7,526 18	566 60	566 60	.....
Distribution System, Overhead....	56,650 64	60,786 79	11,567 75	11,964 34	9,757 63
Dist. System, Underground.....	.....	.....	.....	.....	.....
Line Transformers.....	15,479 05	22,958 86	2,357 69	2,357 69	1,674 39
Meters.....	25,646 04	28,507 44	2,033 50	2,501 04	820 96
Street Light Equipment, Regular...	9,058 74	9,547 84	971 65	971 65	434 91
Street Light Equip., Ornamental...	500 00	500 00	.....	.....	.....
Miscellaneous Construction Exp...	1,328 76	2,203 96	2,189 46	2,189 46	1,871 56
Steam or Hydraulic Plant.....	33,282 00	33,282 00	.....	.....	.....
Old Plant.....	.....	.....	739 50	739 50	.....
Total Plant.....	177,945 15	194,266 81	21,226 15	22,090 28	14,559 45
Bank and Cash Balance.....	12,552 52	4,506 91	126 50	.....	571 80
Securities and Investments.....	.....	.....	.....	.....	.....
Accounts Receivable.....	4,062 14	6,803 33	33 51	553 23	311 90
Inventories.....	10,205 30	18,816 69	106 08	144 45	15 00
Sinking Fund on Local Debentu's..	86,234 06	94,869 39	.....	.....	.....
Equity in Hydro System.....	.....	.....	.....	.....	.....
Equity in Rural Lines.....	.....	.....	.....	.....	.....
Other Assets.....	.....	.....	.....	.....	.....
H.E.P.C. Operating Account.....	12,179 68	.....	.....	.....	.....
Total Assets.....	303,178 85	319,263 13	21,492 24	22,787 96	15,458 15
Deficit.....	.....	.....	1,658 39	4,085 74	4,945 02
Total.....	303,178 85	319,263 13	23,150 63	26,873 70	20,403 17
LIABILITIES					
Debenture Balance.....	141,000 00	141,000 00	17,975 19	17,283 34	6,818 56
Accounts Payable.....	2,664 67	6,736 34	.....	60 00	8,629 95
Bank Overdraft.....	.....	.....	.....	444 28	.....
Other Liabilities.....	.....	.....	.....	.....	.....
H.E.P.C. Operating Account.....	.....	1,474 45	1,397 63	3,794 42	3,783 22
Total Liabilities.....	143,664 67	149,210 79	19,372 82	21,582 04	19,231 73
RESERVES					
Debentures Paid.....	.....	.....	1,944 81	2,636 66	681 44
Sinking Fund Reserve.....	86,234 06	94,869 39	.....	.....	.....
Reserve for Equity in Hydro Sys...	.....	.....	.....	.....	.....
Reserve for Equity in Rural Lines...	.....	.....	.....	.....	.....
Depreciation Reserve.....	18,454 65	23,577 82	1,833 00	2,655 00	490 00
Total Reserves.....	104,688 71	118,447 21	3,777 81	5,291 66	1,171 44
Surplus.....	54,825 47	51,605 13	.....	.....	.....
Total.....	303,178 85	319,263 13	3,150 63	26,873 70	20,403 17
Percentage of Net Debt to Total Assets	47.4	46.7	90.1	94.7	124.4

“A”—Continued
of Hydro Municipalities as at December 31st, 1920

			OTTAWA SYSTEM		RIDEAU SYSTEM	
Tara	EUGENIA SYSTEM SUMMARY		Ottawa 107,732		Carleton Place 3,884	
1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
.....	35,565 04	36,045 04	90,151 99	113,993 73	5,702 12	5,652 12
.....	13,034 95	13,034 95	113,189 70	128,283 36	626 81	2,313 52
10,069 52	236,181 00	251,975 10	358,560 35	388,321 94	20,326 85	25,514 77
.....	.....	.....	79,517 29	84,704 84	.....	.....
1,674 39	48,920 94	65,101 67	121,907 12	142,143 24	7,730 47	8,993 26
1,002 48	53,250 89	63,525 10	132,140 44	141,670 27	8,440 50	10,097 89
463 30	19,761 34	21,257 77	60,278 15	60,802 44	536 48	601 76
.....	500 00	500 00	29,975 55	29,975 55	.....	.....
1,871 56	24,229 89	25,693 96	32,787 35	32,247 35	6,976 95	8,570 32
.....	33,282 00	.....	.....	.....	.....	.....
.....	27,467 45	56,187 88	.....	.....	.....	.....
15,081 25	492,193 50	533,321 47	1,018,507 94	1,122,142 72	50,340 18	61,743 64
829 89	22,457 71	19,657 49	18,173 08	1,686 79	.....	3,009 96
.....	1,000 00	1,000 00	30,000 00	50,000 00	.....	.....
336 24	11,010 86	13,294 50	37,052 21	33,845 93	1,619 86	4,391 95
16 77	19,063 92	26,078 53	34,028 72	51,682 97	947 31	6,852 22
.....	86,706 73	95,523 37	179,891 76	205,404 03	.....	.....
.....	.....	99 38	.....	.....	.....	.....
.....	14,989 21	.....	2,290 18	.....	2,932 53	5,214 13
16,264 15	647,421 93	688,974 74	1,319,943 89	1,464,762 44	55,839 88	81,211 90
7,737 02	44,611 85	78,267 92	.....	.....	.....	.....
24,001 17	692,033 78	767,242 66	1,319,943 89	1,464,762 44	55,839 88	81,211 90
12,565 99	386,429 79	390,126 01	700,000 00	700,000 00	40,000 00	45,762 64
4,063 22	39,059 70	51,383 58	4,553 85	33,162 25	598 05	19,655 60
.....	1,816 49	5,650 21	.....	43,571 66	10,084 47	10,884 72
.....	.....	.....	.....	7,944 30	.....	.....
5,402 95	49,008 67	76,012 81	.....	.....	.....	.....
22,032 16	476,314 65	523,172 61	704,553 85	784,678 21	50,682 52	76,302 96
934 01	25,242 78	33,201 54	.....	.....	.....	1,137 36
.....	86,706 73	95,523 37	179,891 76	205,404 03	.....	.....
.....	.....	99 38	4,800 00	.....	.....	.....
1,035 00	44,627 84	61,391 04	339,702 91	374,981 09	1,735 00	3,626 00
1,969 01	156,577 35	190,215 33	524,394 67	580,385 12	1,735 00	4,763 36
.....	59,141 78	53,854 72	90,995 37	99,699 11	3,422 36	145 58
24,001 17	692,033 78	767,242 66	1,319,943 89	1,464,762 44	55,839 88	81,211 90
135. 5	73. 6	82. 0	53. 4	53. 6	90. 8	93. 9

STATEMENT

Comparative Balance Sheets of Electric Departments

Municipality	Perth		Smith's Falls	
Population	3,545		6,665	
	1919	1920	1919	1920
	\$ c.	\$ c.	\$ c.	\$ c.
ASSETS				
Lands and Buildings.....			20,788 10	20,788 10
Sub-Station Equipment.....	3,685 82	3,686 42	4,704 73	4,835 02
Distribution System, Overhead.....	29,014 33	30,425 22	53,984 03	59,322 50
Dist. System, Underground.....				
Line Transformers.....	12,431 69	13,623 77	11,744 34	13,988 19
Meters.....	10,020 84	11,724 60	17,646 29	19,195 00
Street Light Equipment, Regular.....	11 61	1,525 56	1,801 89	1,801 89
Street Light Equip., Ornamental.....				
Miscellaneous Construction Exp.....	2,388 19	2,388 19	7,825 76	8,203 50
Steam or Hydraulic Plant.....	32,470 76	32,470 76	38,251 49	38,251 49
Old Plant.....	10,982 00	2,674 25	21,791 99	21,766 99
Total Plant.....	101,005 24	98,518 77	178,538 62	188,152 68
Bank and Cash Balance.....			40 00	984 37
Securities and Investments.....				
Accounts Receivable.....	5,500 59	5,160 13	188 21	1,991 40
Inventories.....	11,194 72	13,021 49	6,465 07	11,903 14
Sinking Fund on Local Debentures.....				
Equity in Hydro System.....				
Equity in Rural Lines.....				
Other Assets.....				
H.E.P.C. Operating Account.....			1,058 87	
Total Assets.....	711,700 55	116,700 39	186,290 77	203,031 59
Deficit.....	589 38		11,398 52	20,501 30
Total.....	118,289 93	116,700 39	197,689 29	223,532 89
LIABILITIES				
Debenture Balance.....	56,023 21	47,026 80	152,959 91	171,588 32
Accounts Payable.....	1,062 00	13,627 07	15,420 91	24,715 25
Bank Overdraft.....	53,964 66	41,537 03	12,820 38	
Other Liabilities.....				
H.E.P.C. Operating Account.....	1,719 27	5,294 31		700 04
Total Liabilities.....	112,769 14	107,485 21	181,201 20	197,003 61
RESERVES				
Debentures Paid.....	1,276 79	1,973 20	8,265 09	13,136 68
Sinking Fund Reserve.....				
Reserve for Equity in Hydro Sys.....				
Reserve for Equity in Rural Lines.....				
Depreciation Reserve.....	4,244 00	6,737 00	8,223 00	13,392 60
Surplus.....	5,520 79	8,710 20	16,488 09	26,529 28
		504 98		
Total.....	118,289 93	116,700 39	197,689 29	223,532 89
Percentage of Net Debt to Total Assets	95.8	92.1	91.7	97.0

“A”—Continued
of Hydo Municipalities as at December 31st, 1920

RIDEAU SYSTEM SUMMARY		ALL SYSTEMS					
		GRAND SUMMARY					
1919		1920		1919		1920	
\$	c.	\$	c.	\$	c.	\$	c.
26,490	22	26,440	22	1,995,545	83	2,175,568	24
9,017	36	10,834	96	2,915,125	56	3,231,050	80
103,325	21	115,262	49	7,445,820	31	8,579,881	49
.....		.....		1,206,296	88	1,313,369	29
31,906	50	36,605	22	2,073,113	45	2,560,581	59
36,107	63	41,017	49	2,587,566	32	3,053,135	20
2,349	98	3,929	21	1,206,638	71	1,269,006	98
.....		.....		546,497	68	557,678	13
17,190	90	19,162	01	2,530,101	08	2,697,636	12
70,722	25	70,722	25	986,200	57	757,194	47
32,773	99	24,441	24	805,959	89	864,298	39
329,884	04	348,415	09	24,298,866	28	27,059,400	70
40	00	3,994	33	462,437	23	943,858	12
.....		.....		627,076	53	341,855	88
7,308	66	11,543	48	1,356,565	14	1,447,585	92
18,607	10	31,776	85	1,032,569	75	1,400,671	89
.....		.....		1,925,455	77	2,244,004	34
.....		.....		344,410	94	531,299	63
.....		.....		24,660	95	46,284	43
.....		.....		86,216	05	25,447	07
3,991	40	5,214	13	564,601	55	574,952	96
359,831	20	400,943	88	30,722,860	19	34,615,360	94
11,987	90	20,501	30	186,836	24	182,946	17
371,819	10	421,445	18	30,909,696	43	34,798,307	11
248,983	12	264,377	76	18,133,462	44	19,268,072	04
17,080	96	57,997	92	1,137,705	04	1,430,674	27
76,869	51	52,421	75	403,235	57	514,671	99
.....		.....		670,271	90	642,293	65
1,719	27	5,994	35	283,221	62	409,463	27
344,652	86	380,791	78	20,627,896	57	22,265,175	22
9,541	88	16,247	24	1,328,657	68	1,440,156	52
.....		.....		1,754,020	37	2,246,474	47
.....		.....		344,410	94	531,299	63
.....		.....		29,460	95	46,284	43
14,202	00	23,755	60	3,750,162	28	4,788,645	03
23,743	88	40,002	84	7,206,712	22	9,052,860	08
3,422	36	650	56	3,075,087	64	3,480,271	81
371,819	10	421,445	18	30,909,696	43	34,798,307	11
104.4		95.		67.9		65.3	

STATE-
Report showing Operation of Municipalities on the

Municipality	Popu- lation	Power Purchased	Operation and Main- tenance	Debenture Charges and Interest	Total Operation	Revenue	Gross Surplus
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Acton.....	1,563	5,089 11	4,105 73	462 96	9,657 80	12,321 06	2,663 26
Ailsa Craig.....	486	5,223 55	360 65	432 25	6,016 45	8,188 57	2,172 12
Ancaster Twp...	.....	2,357 59	1,795 09	1,616 85	5,769 53	7,699 96	1,930 43
Aylmer.....	2,247	6,914 46	3,610 19	3,923 74	14,448 39	18,507 75	4,059 36
Ayr.....	802	2,979 68	683 98	1,119 31	4,782 97	6,684 43	1,901 46
Baden.....	.....	5,356 87	557 33	153 51	6,067 71	7,723 21	1,655 50
Beachville.....	.....	7,754 08	628 61	.....	8,382 69	10,351 82	1,969 13
Blenheim.....	1,490	5,813 80	2,203 87	1,116 18	9,133 85	12,273 69	3,139 84
Bolton.....	587	5,049 19	852 72	1,301 84	7,203 75	8,826 72	1,622 97
Bothwell.....	680	6,143 05	479 10	1,320 51	7,942 66	10,809 02	2,866 36
Brampton.....	4,270	20,818 69	5,818 72	3,577 07	30,214 48	33,683 35	3,468 87
Brantford.....	32,159	74,367 64	38,526 13	19,782 38	132,676 15	149,320 10	16,643 95
Brantford Twp..	.....	4,170 64	4,083 03	4,249 19	12,502 86	13,306 21	803 35
Bridgen.....	.....	4,176 59	671 01	921 95	5,769 55	8,159 48	2,389 93
Burford.....	.....	2,400 95	645 13	505 52	3,551 60	4,249 56	697 96
Burgessville....	.....	1,117 11	169 87	278 27	1,565 25	1,790 84	225 59
Caledonia.....	1,265	1,596 05	657 29	350 22	2,603 56	3,909 79	1,306 23
Chatham.....	15,182	67,557 26	31,355 94	17,120 10	116,033 30	147,290 31	31,257 01
Clinton.....	1,809	7,271 67	2,350 93	3,000 53	12,623 13	15,213 70	2,590 57
Comber.....	.....	4,770 69	586 40	653 55	6,010 64	7,765 26	1,754 62
Chippawa.....	1,172	760 70	1,049 26	755 57	2,565 53	3,500 48	934 95
Dashwood.....	.....	2,456 59	293 60	224 06	2,974 25	3,249 65	275 40
Delaware.....	.....	603 70	73 56	208 75	886 01	1,247 29	361 28
Dereham Twp...	.....	2,011 61	1,461 06	3,397 34	6,870 01	6,749 17	.....
Dorchester.....	.....	1,005 45	362 40	253 62	1,621 47	2,511 65	890 18
Drayton.....	600	3,108 98	238 73	667 08	4,014 79	4,867 60	852 81
Dresden.....	1,411	6,266 51	1,698 74	1,396 48	9,361 73	14,586 32	5,224 59
Drumbo.....	.....	826 50	259 90	283 96	1,370 36	1,989 30	618 94
Dublin.....	.....	1,341 17	259 68	519 46	2,120 31	2,612 36	492 05
Dundas.....	5,009	18,712 98	11,793 70	3,787 70	34,294 38	40,928 55	6,634 17
Dunnville.....	3,517	10,142 98	3,357 86	5,141 02	18,641 86	19,763 93	1,122 07
Dutton.....	860	3,454 09	1,192 05	506 58	5,152 72	6,855 55	1,702 83
Elmira.....	2,392	7,534 73	2,809 64	1,447 96	11,792 33	15,884 87	4,092 54
Elora.....	1,205	6,748 21	2,600 11	1,027 00	10,375 32	13,130 00	2,754 68
Embro.....	437	3,064 83	385 93	736 97	4,187 73	4,831 91	644 18
Etobicoke Twp..	.....	5,880 85	4,921 80	7,165 83	17,968 48	28,159 02	10,190 54
Exeter.....	1,445	6,118 90	2,431 44	1,202 29	9,752 63	13,400 15	3,647 52
Fergus.....	1,710	6,056 91	2,787 12	1,367 14	10,211 17	10,968 66	757 49
Forest.....	1,422	5,968 41	2,510 48	2,811 10	11,289 99	14,396 52	3,106 53
Galt.....	12,434	56,601 99	21,851 58	15,583 60	94,037 17	123,370 33	29,333 16
Georgetown.....	2,121	16,197 02	4,235 13	1,422 26	21,854 41	30,410 72	8,556 31
Glencoe.....	824	1,065 03	250 33	37 39	1,352 75	2,205 27	852 52
Goderich.....	4,220	21,361 52	7,429 41	4,668 00	33,458 93	37,753 75	4,294 82
Granton.....	.....	2,040 89	250 37	286 05	2,577 31	3,336 66	759 35
Grantham Twp..	.....	1,234 59	845 38	3,034 31	5,114 28	5,788 41	674 13
Guelph.....	17,032	71,075 42	36,735 58	7,650 88	115,461 88	132,814 97	17,353 09
Hagersville.....	1,072	7,350 94	1,727 75	335 66	9,414 35	13,815 40	4,401 05
Hamilton.....	108,143	283,321 68	149,294 75	74,613 98	507,230 41	578,570 85	71,340 44
Harriston.....	1,340	10,971 20	2,056 19	1,564 56	14,591 95	15,826 49	1,234 54
Hensall.....	721	3,393 45	734 92	872 92	5,001 29	5,670 36	669 07
Hespeler.....	3,000	8,922 09	5,186 90	2,709 36	16,818 35	18,204 11	1,385 76
Highgate.....	371	2,466 02	304 32	326 21	3,096 55	3,985 39	888 84
Ingersoll.....	5,385	24,478 35	10,259 48	3,345 53	38,083 36	46,259 53	8,176 17
Kitchener.....	21,056	130,187 39	39,602 53	15,676 40	185,466 32	226,321 94	40,855 62
Lambeth.....	.....	1,277 46	202 58	331, 26	1,811 30	2,374 16	562 87

MENT "B"

Niagara System for Period ending December 31st, 1920

Gross Deficit	Depreci- ation	Net Surplus	Net Deficit	Number of Consumers					PerCent of Con- sumers to Popu- lation	H.P. taken in Dec. 1920
				Dom Lt.	Com'l Lt.	Po- wer	Ru- ral	To- tal		
\$ c.	\$ c.	\$ c.	\$ c.							
.....	721 00	1,942 26	.....	260	71	10	.....	341	21.8	193
.....	414 00	1,758 12	.....	78	30	3	1	112	23	144.7
.....	1,075 00	855 43	.....	363	34	3	.....	400	.....	.....
.....	1,006 00	3,053 36	.....	379	109	7	.....	495	22	189
.....	496 00	1,405 46	.....	105	43	6	.....	154	19.2	76.4
.....	420 00	1,235 50	.....	73	28	6	.....	107	.....	213
.....	504 00	1,465 13	.....	69	19	3	.....	91	.....	284
.....	938 00	2,201 84	.....	308	91	11	.....	410	27.5	136.7
.....	843 00	779 97	.....	97	43	9	25	174	29.6	118
.....	574 00	2,292 36	.....	112	53	11	.....	176	25.9	126
.....	3,963 00	.....	494 13	896	182	35	14	1,127	26.4	905
.....	12,790 00	3,853 95	.....	3,938	434	58	.....	4,431	13.8	3,927.6
.....	1,812 00	.....	1,008 65	391	22	4	23	440	.....	.....
.....	351 00	2,038 93	.....	57	35	3	.....	95	.....	106.96
.....	305 00	392 96	.....	115	34	1	3	153	.....	45.5
.....	170 00	55 59	.....	45	10	1	.....	56	.....	43.4
.....	445 00	861 23	.....	60	49	9	.....	118	9.3	71.4
.....	7,682 00	23,575 01	.....	3,360	572	87	.....	4,019	26.5	2,239.2
.....	1,356 00	1,234 57	.....	332	140	11	.....	483	26.7	194.3
.....	292 00	1,462 62	.....	62	40	2	.....	104	.....	115.2
.....	501 84	433 11	.....	116	23	.....	.....	139	.....	69.7
.....	164 00	111 40	.....	39	21	2	.....	62	.....	47
.....	134 00	227 28	.....	34	11	.....	.....	44	.....	13.4
120 84	2,112 00	.....	2,232 84	.....	.....	.....	149	149	.....	60.3
.....	273 00	617 18	.....	96	15	3	.....	114	.....	29.5
.....	393 00	459 81	.....	110	30	2	.....	142	23.7	69.7
.....	683 00	4,541 59	.....	244	106	8	.....	358	25.4	118
.....	191 00	427 94	.....	53	24	1	.....	78	.....	29
.....	243 00	249 05	.....	21	15	3	.....	39	.....	42.3
.....	4,132 00	2,502 17	.....	754	158	42	62	1016	20.3	1,089.8
.....	2,275 00	.....	1,152 93	205	141	16	.....	362	10.3	264
.....	489 00	1,213 83	.....	155	71	3	1	230	26.7	114
.....	1,248 00	2,844 54	.....	313	94	15	.....	422	17.6	227.8
.....	870 00	1,884 68	.....	186	70	3	1	260	21.6	182.3
.....	387 00	257 18	.....	71	31	3	1	106	24.2	28.6
.....	4,638 00	5,552 54	.....	1,140	77	12	.....	1,229	.....	335
.....	879 00	2,768 52	.....	234	94	7	.....	335	23.2	173.7
.....	1,090 00	.....	332 51	291	96	12	4	403	23.6	211.8
.....	1,033 00	2,073 53	.....	311	102	14	.....	427	30	111.2
.....	11,959 00	17,374 16	.....	2,766	404	103	.....	3,273	26.3	3,114
.....	2,031 00	6,525 31	.....	373	94	28	52	547	25.8	522.
.....	.....	852 52	.....	124	56	2	5	187	22.7	74
.....	3,956 00	338 82	.....	793	179	17	15	1,004	23.8	455.7
.....	202 00	557 35	.....	57	21	2	.....	80	.....	62.61
.....	440 30	233 83	.....	.....	.....	.....	189	189	.....	35.5
.....	11,050 00	6,303 09	.....	3,064	548	93	.....	3,705	21.6	3,894
.....	668 00	3,733 05	.....	170	75	10	.....	255	23.8	286.8
.....	54,365 72	16,974 72	.....	18195	1,831	598	630	21254	19.6	18,445
.....	724 00	510 54	.....	202	78	9	.....	289	21.5	250.6
.....	498 00	171 07	.....	120	43	6	.....	169	23.4	51.4
.....	1,800 00	.....	414 24	442	89	13	.....	544	18	355.2
.....	274 00	614 84	.....	59	30	6	.....	95	25.6	28
.....	3,825 00	4,351 17	.....	936	220	55	10	1,221	22.6	1,077.7
.....	17,357 00	23,498 62	.....	3,524	611	179	20	4,334	20.5	6,541.5
.....	204 00	358 86	.....	72	14	2	.....	88	.....	23.3

STATEMENT

Report Showing Operation of Municipalities on the

Municipality	Popu- lation	Power Purchased	Operation and Main- tenance	Debenture Charges and Interest	Total Operation	Revenue	Gross Surplus
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Listowel.....	2,551	16,048 92	5,371 06	3,480 95	24,900 93	26,149 15	1,248 22
London.....	59,100	225,905 12	133,790 95	60,816 15	420,512 22	497,166 68	76,654 46
Louth Twp.....			339 35	428 12	767 47	608 61	
Lucan.....	620	5,577 59	1,841 39	711 25	8,130 23	10,376 70	2,246 47
Lynden.....		3,794 56	154 54	378 63	4,327 73	5,214 69	886 96
Markham.....	836	1,656 78	825 29	665 28	3,147 35	4,498 74	1,351 38
Milton.....	1,800	17,960 50	2,960 52	2,178 35	23,099 37	24,401 67	1,301 30
Milverton.....	1,044	9,395 97	1,133 01	662 68	11,191 66	12,964 19	1,772 53
Mimico.....	2,887	6,716 60	5,659 96	1,944 99	14,321 55	19,251 55	4,930 00
Mitchell.....	1,656	6,048 86	3,133 63	1,788 30	10,970 79	16,208 49	5,237 70
Moorefield.....		1,730 12	139 72	391 99	2,261 83	2,668 74	406 91
Mt. Brydges.....		1,500 93	166 06	272 43	1,939 42	2,819 78	880 36
Niagara-on-the- Lake	1,918	4,257 81	3,657 11	1,522 54	9,437 46	12,036 56	2,599 10
Niagara Falls...	14,207	38,754 10	30,089 99	14,550 43	83,394 52	103,582 58	20,188 06
New Hamburg...	1,370	6,737 44	2618 24	1,088 73	10,444 41	13,115 91	2,671 50
New Toronto....	2,696	84,628 66	7,488 30		92,116 96	108,418 15	16,301 19
Norwich.....	1,271	7,274 43	7,211 47	790 30	15,276 20	20,430 77	5,154 57
Oil Springs.....	473	4,206 09	599 16	996 83	5,802 08	7,110 31	1,308 23
Otterville.....		1,482 04	206 18	375 89	2,064 11	3,917 13	1,853 02
Palmerston.....	1,890	5,477 12	1,976 78	2,040 43	9,494 33	14,313 60	4,819 27
Parkhill.....	1,213	1,948 86	355 55	687 35	2,991 76	4,199 13	1,207 37
Paris.....	4,320	13,643 00	7,601 15	6,247 88	27,492 03	34,389 38	6,897 35
Petrolia.....	2,863	14,819 20	7,279 25	3,873 05	25,971 50	36,563 02	10,591 52
Plattsville.....		3,704 74	368 65	366 35	4,439 74	5,601 59	1,161 85
Pt. Colborne....	3,235	3,860 24	3,069 53	3,395 63	10,325 40	11,301 92	976 52
Pt. Credit.....	878	2,135 05	1,443 34	493 23	4,071 62	5,953 98	1,882 36
Pt. Dalhousie...	1,447	2,824 98	2,475 74	1,329 35	6,630 07	7,412 90	782 83
Pt. Stanley.....	717	7,065 21	4,733 00	776 95	12,575 16	14,112 37	1,537 21
Preston.....	5,184	30,575 23	12,748 61	7,591 82	50,915 66	56,327 80	5,412 14
Princeton.....		1,140 19	153 12	288 01	1,581 32	1,863 43	282 11
Ridgetown.....	2,150	6,591 24	2,298 01	1,506 78	10,396 03	15,901 13	5,505 10
Rockwood.....		2,315 39	484 40	342 71	3,142 50	3,687 42	544 92
Rodney.....	686	2,379 44	596 84	572 99	3,549 27	5,652 12	2,102 85
St. George.....		2,201 20	335 64	288 68	2,825 52	4,844 70	2,019 18
St. Jacob's.....		2,075 55	271 21	496 49	2,843 25	4,234 37	1,391 12
St. Mary's.....	3,886	20,326 52	6,575 94	4,794 07	31,696 53	34,385 60	2,689 07
St. Thomas.....	17,759	58,936 05	30,639 90	6,870 11	96,446 06	126,800 15	30,354 09
St. Catharines...	19,195	54,851 62	31,383 24	15,526 58	101,761 44	131,374 64	29,613 20
Sarnia.....	12,649	85,966 39	35,388 72	19,961 44	141,316 55	196,346 81	55,030 26
Seaforth.....	2,015	12,783 27	2,890 58	1,108 14	16,781 99	20,389 15	3,607 16
Simcoe.....	3,756	4,416 40	2,640 68	1,552 73	8,609 81	14,661 85	6,052 04
Springfield.....	420	1,814 34	297 56	1,022 46	3,134 36	3,472 47	338 11
Stamford Twp...		5,468 99	4,542 27	2,190 90	12,202 16	15,464 96	3,262 80
Scarboro Twp...		3,722 74	3,413 06	5,284 95	12,420 75	14,675 93	2,255 18
Strathroy.....	2,637	12,122 08	3,790 96	3,452 49	19,365 53	29,409 13	10,043 60
Stratford.....	18,106	48,593 60	25,332 91	17,625 66	91,552 17	113,540 01	21,987 84
Tavistock.....	876	8,472 75	666 19	31 89	9,170 83	12,786 32	3,615 49
Thamesford.....		3,589 17	558 41	524 96	4,672 54	6,455 87	1,783 33
Thamesville....	804	2,653 26	506 26	910 10	4,069 62	5,477 06	1,407 44
Thorndale.....		3,942 78	286 81	320 36	4,549 95	5,328 88	778 93
Tilbury.....	1,619	3,635 27	1,470 60	1,246 93	6,352 80	7,647 17	1,294 37
Tillsonburg.....	2,856	17,481 57	6,660 42	2,294 46	26,436 45	34,745 27	8,308 82
Toronto.....	499,278	974,827 92	967,101 03	654,745 10	259,6674 05	309,0622 69	493,948 64
Toronto-Twp...		4,911 00	3,679 44	3,979 26	12,569 70	18,641 08	6,071 38

“B”—Continued

Niagara System for Period ending December 31st, 1920

Gross Deficit	Deprecia- tion	Net Surplus	Net Deficit	Number of Consumers					PerCent of Con- sumer to Popu- lation	H.P. taken in Dec. 1920
				Dom. Lt.	Com'l Lt.	Po- wer	Ru- ral	To- tal		
\$ c.	\$ c.	\$ c.	\$ c.							
.....	1,700 00	.....	451 78	377	132	20	....	529	20.7	498.6
.....	52,593 56	24,060 90	.....	12386	1,979	513	....	14878	25.2	11,300.
158 86	64 00	.....	222 86	.....	..	..	46	46	....	.....
.....	569 00	1,677 47	.....	127	41	10	1	179	28.8	215.8
.....	215 00	671 96	.....	51	16	1	....	68	....	94.5
.....	.....	1,351 38	.....	130	33	4	....	167	19.9	43.4
.....	1,428 00	.....	125 70	289	76	13	4	382	21.2	388.7
.....	527 00	1,245 53	.....	131	63	6	....	200	19.1	290.8
.....	2,183 00	2,747 00	.....	841	45	8	....	894	30.9	412.8
.....	1,784 00	3,453 70	.....	298	106	21	....	425	25.6	201
.....	179 00	227 .1	.....	26	17	2	....	45	.....	48.2
.....	207 00	673 36	.....	84	19	1	....	104	.....	26.8
.....	420 00	2,179 10	.....	275	69	5	4	353	18.4	154
.....	10,164 50	10,023 56	.....	2,907	488	86	....	3,481	24.5	3,849.8
.....	1,155 00	1,516 50	.....	222	66	12	....	300	21.9	214.4
.....	1,905 00	14,396 19	.....	537	57	12	....	606	22.4	2,868.6
.....	812 00	4,342 57	.....	291	84	10	145	530	....	269.4
.....	443 00	865 23	.....	20	12	6	....	38	13.0	95
.....	263 00	1,590 02	.....	70	20	4	....	94	....	38.2
.....	889 00	3,930 27	.....	234	75	5	....	314	16.6	214 4
.....	.....	1,207 37	.....	120	58	1	....	179	14.7	59.6
.....	3,676 00	3,221 35	.....	757	182	12	1	952	22.0	623.
.....	2,414 00	8,177 52	.....	427	176	59	....	662	23.1	536
.....	221 00	940 85	.....	65	26	3	....	94	....	30.8
.....	.....	976 52	.....	465	132	13	....	610	19.0	348.5
.....	674 00	1,208 36	.....	199	44	3	3	249	28.3	111.2
.....	613 00	169 83	.....	360	34	11	....	405	28.0	131.3
.....	969 00	568 21	.....	439	89	20	....	548	....	96.5
.....	5,390 00	22 14	.....	1,010	193	41	....	1,244	24.0	1,426.2
.....	139 00	143 11	.....	64	13	..	....	77	....	16.8
.....	940 00	4,565 10	.....	317	108	8	....	433	20.1	174.2
.....	376 00	168 92	.....	94	18	4	....	116	....	38.8
.....	397 00	1,705 85	.....	104	53	2	....	159	23.2	92
.....	260 00	1,759 18	.....	80	24	4	1	109	....	55
.....	259 00	1,132 12	.....	60	14	2	....	76	....	72.3
.....	3,775 00	.....	1,085 93	759	151	40	....	950	24.4	2,223.8
.....	12,069 00	18,285 09	.....	3,305	523	112	180	4,120	23.2	2,547
.....	12,794 00	16,819 20	.....	3,703	338	69	....	4,110	21.4	3,517
.....	10,141 00	44,889 26	.....	2,918	477	65	203	3,663	28.8	2,902
.....	1,963 00	1,644 16	.....	400	117	13	....	530	24.9	463.8
.....	1,544 00	4,508 04	.....	176	136	20	....	332	8.8	208.3
.....	.....	338 11	.....	50	21	2	7	80	19.0	38.2
.....	1,905 50	1,357 30	.....	673	27	11	....	711	....	403.4
.....	2,394 00	.....	138 82	652	8	3	5	668	....	90
.....	2,073 00	7,970 60	.....	479	159	22	....	660	25.0	362
.....	11,951 00	10,036 84	.....	3,193	423	137	92	3,845	21.2	2,212
.....	469 00	3,146 49	.....	139	64	4	....	207	23.6	316.3
.....	355 00	1,428 33	.....	71	28	3	1	103	....	99
.....	494 00	913 44	.....	168	67	2	....	237	29.6	76.4
.....	185 00	593 93	.....	46	27	2	2	77	....	82.3
.....	494 00	800 37	.....	144	91	6	....	241	14.8	134
.....	2,731 00	5,577 82	.....	480	178	19	....	677	23.7	406.8
.....	371,221 00	122,727 64	.....	57685	11307	2,390	....	71382	14.3	62,339
.....	3,864 00	2,207 38	.....	398	.....	12	....	410	.....	226.2

STATEMENT
Report Showing Operation of Municipalities on the Niagara

Municipality	Popu- lation	Power Purchased	Operation and Main- tenance	Debenture Charges and Interest	Total Operation	Revenue	Gross Surplus
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Vaughan Twp....		1,817 38	178 70	2,544 48	4,540 56	3,861 52	.....
Walkerville.....	9,741	117,586 40	39,507 85	13,703 57	170,797 82	217,450 60	46,652 78
Wallaceburg....	4,067	26,426 93	5,903 77	4,066 90	36,397 60	54,941 95	18,544 35
Waterdown.....	791	3,342 48	961 68	1,335 99	5,640 15	8,522 60	2,882 45
Waterford.....	1,084	3,789 51	1,144 57	1,684 79	6,618 87	8,727 05	2,108 18
Waterloo.....	5,476	24,149 70	15,527 63	4,142 19	43,819 52	52,440 24	8,620 72
Watford.....	1,033	4,930 40	595 51	973 76	6,499 67	8,395 47	1,895 80
Welland.....	9,135	46,965 89	21,571 84	15,873 25	84,410 98	94,732 81	10,321 83
Wellesley.....		4,293 85	530 49	572 46	5,396 80	6,295 82	899 02
West Lorne.....	787	3,600 75	648 34	601 68	4,850 77	8,780 83	3,930 06
Weston.....	2,570	22,091 04	5,249 69	1,061 96	28,402 69	40,117 47	11,714 78
Windsor.....	35,272	191,423 61	117,055 60	37,703 79	346,183 00	442,754 82	96,571 82
Woodbridge....	587	4,790 94	482 59	480 50	5,754 03	8,424 28	2,670 25
Woodstock.....	10,126	34,269 52	18,376 86	5,075 78	57,722 16	73,806 31	16,084 15
Wyoming.....	503	1,957 86	421 04	641 39	3,020 29	3,694 81	674 52
Zurich.....		3,424 54	403 69	312 11	4,140 34	5,727 02	1,586 68
Total.....		3344747 49	2031557 56	1184802 94	6561107 99	7982614 04	1422464 79

THUNDER BAY

Port Arthur....	15,094	108,230 49	45,511 39	44,358 21	198,100 09	273,635 74	75,535 65
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SEVERN

Alliston.....	1,264	8,812 29	1,782 92	2,968 48	13,563 69	14,123 77	560 08
Barrie.....	6,775	19,973 83	5,787 89	3,476 93	29,238 65	40,100 56	10,861 91
Beeton.....	571	7,055 91	413 84	1,166 71	8,636 46	7,170 95	.....
Bradford.....	885	5,441 62	800 81	1,546 43	7,788 86	4,971 49	.....
Coldwater.....	595	2,266 49	753 71	632 47	3,652 67	4,598 43	945 76
Collingwood....	7,262	47,258 00	6,722 89	1,665 66	55,646 55	51,326 04	.....
Cookstown.....		3,204 59	387 95	1,020 10	4,612 64	4,577 08	.....
Creemore.....	612	3,185 30	504 64	474 24	4,164 18	5,257 89	1,093 71
Elmvale.....		4,379 26	958 34	445 94	5,783 54	6,840 08	1,056 54
Midland.....	6,532	31,831 55	7,709 40	4,549 12	44,090 07	50,629 38	6,539 31
Penetang.....	3,811	23,367 70	4,082 37	2,408 44	29,858 51	32,963 47	3,104 96
Pt. McNicoll....	531	1,826 70	499 68	559 91	2,886 29	2,623 64	.....
Stayner.....	915	4,047 91	796 35	1,249 52	6,093 78	8,414 82	2,321 04
Thornton.....	469	1,232 81	104 41	472 51	1,809 73	1,210 86	.....
Tottenham.....		3,590 00	436 90	1,196 12	5,223 02	3,569 26	.....
Victoria Harbor.	1,441	2,138 45	793 79	536 12	3,468 36	3,303 35	.....
Waubashene....		963 72	344 41	310 61	1,618 74	1,959 21	340 47
Total.....	33,263	170,576 13	32,880 30	24,679 31	228,135 74	243,640 28	26,823 78

“B”—Continued

System for Period ending December 31st, 1920

Gross Deficit	Deprecia- tion	Net Surplus	Net Deficit	Number of Consumers					PerCent of Con- sumers to Popu- lation	H.P. taken in Dec. 1920
				Dom. Lt.	Com' Lt.	Po- wer	Ru- ral	To- tal		
\$ c. 679 04	\$ c. 307 00	\$ c.	\$ c. 986 04	47	10	6	9	72	.....	.....
.....	9,624 00	37,028 78	.....	2,904	336	78	.....	3,318	34.1	2,740
.....	2,628 00	15,916 35	.....	621	179	52	34	886	21.7	978.5
.....	1,211 00	1,671 45	.....	134	31	3	49	217	27.4	106
.....	740 00	1,368 18	.....	171	50	5	11	237	21.8	108.5
.....	6,334 33	2,286 39	.....	995	169	68	19	1,251	22.8	1,189
.....	514 00	1,381 80	.....	136	70	7	.....	213	20.6	77.7
.....	9,736 00	585 83	.....	1,092	172	34	.....	1,298	14.2	1,923.2
.....	326 00	573 02	.....	76	30	3	.....	109	.....	124.6
.....	392 00	3,538 06	.....	75	45	2	.....	122	15.2	154
.....	3,056 00	8,658 78	.....	745	104	13	14	876	34.0	945
.....	15,771 00	80,800 82	.....	8,700	1,220	273	.....	10193	28.9	9,586
.....	630 00	2,040 25	.....	98	40	5	2	145	24.7	170.8
.....	8,131 00	7,953 15	.....	1,850	400	77	.....	2,327	22.9	1,665
.....	344 00	330 52	.....	100	20	2	1	123	24.4	48.7
.....	262 00	1,324 68	.....	55	39	2	.....	96	.....	85.4
958 74	761,504 75	668,647 73	8,646 43	163560	29186	6040	2039	200825	171,150 27

SYSTEM

.....	11,492 00	64,043 65	2,960	590	59	3,609	23.9	6,950
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SYSTEM

.....	1,299 00	738 92	248	88	14	350	27.7	161.6
.....	4,233 50	6,628 41	1,279	280	23	1,582	23.3	945
1,465 51	577 00	.....	2,042 51	76	28	2	.....	106	18.5	93.8
2,817 37	724 00	.....	3,541 37	89	47	2	.....	138	15.6	61.6
.....	497 00	448 76	.....	87	47	4	.....	138	23.2	67.8
4,320 51	3,750 00	.....	8,070 51	1,077	242	52	2	1,373	18.9	1,005
35 56	486 00	.....	521 56	71	21	1	.....	93	.....	66
.....	358 00	735 71	.....	130	52	6	.....	188	30.7	42.8
.....	523 00	533 54	.....	101	63	5	.....	169	.....	115.8
.....	5,826 25	713 06	.....	1,091	191	40	.....	1,322	20.2	1,579
.....	2,764 00	340 96	.....	328	91	25	.....	444	11.6	923.5
262 65	255 00	.....	517 65	103	23	1	.....	127	23.9	36.7
.....	641 00	1,680 04	.....	151	62	5	.....	218	23.8	182.5
598 87	299 00	.....	897 87	33	10	.....	.....	43	.....	12.7
1,653 76	418 00	.....	2,071 76	82	41	.....	.....	123	26.2	38
165 01	342 00	.....	507 01	89	39	.....	.....	128	8.8	57.3
.....	194 00	146 47	.....	71	18	1	.....	90	.....	24
11,319 24	23,186 75	11,226 95	18,909 16	5,106	1,343	181	2	6,632	.....	5,413.1

STATEMENT
Report Showing Operation of Municipalities on St. Lawrence

Municipality	Popu- l ation	Power Purchased	Operation and Main- tenance	Debenture Charges and Interest	Total Operation	Revenue	Gross Surplus
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Brockville.....	9,326	49,713 84	26,016 83	17,622 28	93,352 95	88,898 69	.....
Chesterville.....	949	11,569 91	1,166 73	1,032 20	13,768 84	14,621 89	853 05
Prescott.....	2,774	10,779 58	5,113 93	2,254 35	18,147 86	19,423 56	1,275 70
Williamsburg.....	.....	1,020 79	197 09	277 16	1,495 04	1,550 52	55 48
Winchester.....	1,019	6,470 61	1,804 59	959 77	9,234 97	8,763 55	.....
Total.....	14,468	79,554 73	34,299 17	22,145 76	135,999 66	133,258 21	2,184 23

WASDELL

Beaverton.....	949	6,161 84	1,342 01	1,532 92	9,036 77	11,113 94	2,077 17
Brechin.....	.....	3,309 97	437 31	396 11	4,143 39	3,250 09	.....
Cannington.....	838	5,203 62	1,126 62	1,320 63	7,650 87	8,015 87	365 00
Kirkfield.....	.....	413 70	136 21	22 69	572 60	678 26	105 66
Sunderland.....	.....	4,053 83	754 13	1,201 52	6,009 48	5,110 18	.....
Woodville.....	434	3,885 59	531 32	668 69	5,075 60	5,032 11	.....
Total.....	3,421	23,028 55	4,317 60	5,142 56	32,488 71	33,200 45	2,547 83

EUGENIA

Arthur.....	1,172	11,349 83	1,051 85	1,886 75	14,288 43	9,884 74	.....
Chatsworth	303	1,650 22	319 01	541 21	2,510 44	2,010 14	.....
Chesley.....	1,741	12,679 37	1,304 87	2,601 85	16,586 09	15,828 49	.....
Dundalk.....	700	4,373 18	817 38	468 07	5,658 63	5,621 98	.....
Durham.....	1,520	4,958 47	1,051 82	1,728 68	7,738 97	8,932 45	1,193 48
Elmwood.....	.....	2,882 66	193 75	648 90	3,725 31	3,029 57	.....
Grand Valley....	582	4,710 33	391 30	988 50	6,090 13	5,681 31	.....
Flesherton.....	410	2,550 79	240 06	478 28	3,269 13	3,211 00	.....
Hanover.....	2,724	26,087 94	3,807 89	5,319 04	35,214 87	29,524 82	.....
Holstein.....	.....	1,484 58	147 75	382 99	2,015 32	1,206 15	.....
Markdale.....	869	2,973 66	986 00	953 99	4,913 65	6,302 37	1,388 72
Mount Forest...	1,838	10,652 13	1,921 19	2,611 45	15,184 77	12,719 87	.....
Neustadt.....	430	5,030 57	464 15	1,336 71	6,831 43	4,814 86	.....
Orangeville.....	2,186	9,745 84	2,020 37	3,088 37	14,854 58	12,954 42	.....
Owen Sound....	12,218	47,256 74	16,041 95	8,614 29	71,912 98	74,698 89	2,785 91
Shelburne.....	1,063	8,674 95	1,191 42	1,689 57	11,555 94	9,970 26	.....
Tara.....	520	5,002 53	507 01	1,186 83	6,696 37	4,476 37	.....
Total.....	29,076	162,063 79	32,457 77	34,525 48	229,047 04	210,867 69	5,368 11

OTTAWA

Ottawa.....	107,732	96,791 65	111,381 95	41,927 74	250,101 34	305,310 79	55,209 45
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MUSKOKA

Gravenhurst....	1,437	7,022 07	4,586 22	4,089 04	15,697 33	15,875 07	177 74
Huntsville.....	2,160	19,586 93	3,571 85	2,496 92	25,655 70	27,470 67	1,814 97
Total.....	3,597	26,609 00	8,158 08	6,585 96	41,353 03	43,345 74	1,992 71

RIDEAU

Carleton Place..	3,786	23,033 09	7,311 45	3,908 96	34,253 50	34,170 08	.....
Perth.....	4,047	20,083 77	5,002 57	7,885 69	32,972 03	37,329 39	4,357 36
Smith's Falls....	6,665	23,848 30	24,313 78	14,586 20	62,748 28	58,761 34	.....
Total.....	14,498	66,965 16	36,627 80	26,380 85	129,973 81	130,260 81	4,357 36

“B” Continued

System for Period ending December 31st, 1920

Gross Deficit	Deprecia- tion	Net Surplus	Net Deficit	Number of Consumers					Per Cent. of Con- sumers to Popu- lation	H.P. taken in Dec. 1920
				Dom. Lt.	Com'l Lt.	Po- wer	Ru- ral	To- tal		
\$ c. 4,454 26	\$ c. 3,675 00	\$ c.	\$ c. 8,129 26	1,396	344	59	78	1,877	20.1	1,174.2
.....	490 00	363 05	.....	126	47	2	.....	175	18.4	100.5
.....	2,302 00	.....	1,026 30	456	136	21	.....	613	22.1	265.4
.....	118 00	.....	62 52	41	7	2	.....	50	.....	16.8
471 42	536 00	.....	1,007 42	192	47	2	.....	241	23.6	104.5
4,925 68	7,121 00	363 05	10,225 50	2,211	581	86	78	2,956	.....	1,661.4

SYSTEM

.....	538 00	1,539 17	.....	151	52	11	75	289	30.4	109.5
893 30	138 00	.....	1,031 30	24	21	2	6	53	.....	81.7
.....	542 00	.....	177 00	176	68	10	1	255	30.4	92.4
.....	.....	105 66	.....	.....	.....	.....	.....	.....	.....	12
899 30	237 00	.....	1,136 30	79	34	1	16	130	.....	72.3
43 49	170 00	.....	213 49	80	25	3	10	118	27.2	67.5
1,836 09	1,625 00	1,644 83	2,558 09	530	205	28	108	871	.....	435.4

SYSTEM

4,403 69	927 00	.....	5,330 69	95	62	6	.....	163	13.9	151.4
500 30	221 00	.....	721 30	50	28	1	.....	79	26.1	25.7
757 60	1,111 00	.....	1,868 60	259	83	15	.....	357	20.5	253.5
36 65	386 00	.....	422 65	99	75	3	.....	177	25.3	119.3
.....	870 00	323 48	.....	224	86	6	.....	316	20.8	133.5
695 74	259 00	.....	954 74	33	19	1	.....	53	.....	66.3
408 82	473 00	.....	881 82	87	50	1	.....	138	23.7	69.7
58 13	306 00	.....	364 13	85	39	1	.....	125	30.5	59
5,690 05	2,536 00	.....	8,226 05	435	92	14	.....	541	19.4	335.4
809 17	122 00	.....	931 17	29	18	1	.....	48	.....	6.7
.....	573 00	815 72	.....	144	69	8	2	223	25.6	115.2
2,464 90	1,109 00	.....	3,573 90	205	127	9	.....	341	18.5	203.7
2,016 57	502 00	.....	2,518 57	51	26	4	.....	81	18.8	61.6
1,900 16	1,313 00	.....	3,213 16	199	94	10	.....	303	13.8	143.4
.....	6,006 25	.....	3,220 34	1,861	449	105	.....	2,415	19.7	1,442
1,585 68	822 00	.....	2,407 68	182	81	9	.....	272	25.6	219.8
2,220 00	545 00	.....	2,765 00	71	42	5	.....	118	22.7	35.4
23,547 46	18,081 25	1,139 20	37,399 80	4,109	1,440	199	2	5,750	3,441.6

SYSTEM

.....	42,800 00	12,409 45	9,451	1,278	210	10939	10.1	8,291
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SYSTEM

.....	2,170 00	1,992 26	290	80	12	382	26.6	341
.....	884 00	930 97	335	93	6	434	20.1	804
.....	3,054 00	930 97	1,992 26	625	173	18	816	1,145

SYSTEM

83 42	1,891 00	.....	1,974 42	636	144	18	.....	798	21.1	782.8
.....	2,493 00	1,864 36	.....	564	166	19	.....	749	18.5	610
3,986 94	5,615 00	.....	9,601 94	1,121	240	31	.....	1,392	20.8	958.4
4,070 36	9,999 00	1,864 36	11,576 36	2,321	550	68	.....	2,939	.....	2,351.2

STATEMENT
Report Showing Operation of Municipalities on the Trent

Municipality	Popu- lation	Power Purchased	Operation and Main- tenance	Debenture Charges and Interest	Total Operation	Revenue	Gross Surplus
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Bloomfield.....	600	2,365 19	270 53	707 58	3,343 30	3,683 12	339 82
Kingston.....	23,261	48,401 18	49,335 12	22,207 55	119,943 85	151,501 76	31,557 91
Omeme.....	517	1,241 10	324 50	1,092 18	2,657 78	2,822 99	165 21
Peterborough...	21,230	63,440 16	50,810 36	15,207 96	129,458 48	147,516 57	18,058 09
Picton.....	3,165	17,779 92	6,192 96	894 44	24,867 32	37,900 01	13,032 69
Wellington.....	853	3,220 09	939 74	1,148 64	5,308 47	5,471 30	162 83
Lakefield.....	1,133	1,653 24	516 84	.....	2,170 08	2,871 43	701 35
Total.....	50,759	138,100 88	108,390 05	41,258 35	287,749 28	351,767 18	64,017 90
ALL							
Grand Totals....	.....	4216667 87	2445581 66	1431807 16	8094056 69	9707900 93	1660501 81

“B”—Continued

System for Period ending December 31st, 1920

Gross Deficit	Deprecia- tion	Net Surplus	Net Deficit	Number of Consumers					Per Cent. of Con- sumers to Popu- lation	H. P. taken in Dec. 1920.
				Dom Lt.	Com' Lt.	Po- wer	Ru- ral	To- tal		
.....	\$ c. 367 00	\$ c.	\$ c. 27 18	76	15	4	.....	95	15.9	40.2
.....	11,958 00	19,599 91	.....	2,677	772	115	.....	3,564	15.3	1,791
.....	455 00	.....	289 79	83	24	5	.....	112	21.6	38.6
.....	9,177 00	8,881 09	.....	4,463	689	121	.....	5,273	24.8	5,061.41
.....	653 00	12,379 69	.....	657	222	32	.....	911	28.8	269.4
.....	555 00	.....	392 17	125	43	3	.....	171	20.0	68.3
.....	.....	701 35	.....	130	62	4	7	203	18.0	124.0
.....	23,165 00	41,562 04	709 14	8,211	1,827	284	7	10,329	.....	7,392.91

SYSTEMS

46,657 57	902,028 75	803,832 23	92,016 74	199094	37173	7173	2,236	245666	20823188
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STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM

Municipality Population	Acton xa 1,570		Ailsa Craig 447		Aylmer xb 2,177	
	1919	1920	1919	1920	1920	1920
Earnings						
Domestic Light.....	\$ 2,628 12 c.	\$ 3,115 26 c.	\$ 1,087 47 c.	\$ 1,292 33 c.	\$ 5,391 99 c.	\$ 6,553 82 c.
Commercial Light.....	1,613 56	1,672 82	49 696	630 19	4,886 86	5,831 46
Power.....	5,329 46	5,230 46	3,786 31	5,400 16	3,318 98	3,192 47
Municipal Power.....						
Street Light.....	1,696 66	1,860 52	790 50	801 12	2,800 00	2,930 00
Rural.....			168 54	64 77		
Miscellaneous.....		442 00				
Total.....	11,267 80	12,321 06	6,329 76	8,188 57	16,397 83	18,507 75
Expenses						
Power Purchased.....	4,905 85	5,089 11	3,739 48	5,223 55	6,334 37	6,914 46
Sub-Stn. Operation.....						
“ “ Maint’ce.....						
Dist. System, Operation and Maintenance.....	934 82	2,177 27	28 10	59 22	1,783 26	2,436 38
Line Transformer M’t’c’e.....						
Meter Maintenance.....						
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	157 13	864 31	71 58	52 03	84 05	332 61
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	754 90	914 15	103 91	201 69	466 69	587 41
Undistributed Expenses.....		150 00		47 71		253 79
Int. and Deb. Payments.....	539 10	462 96	439 01	432 25	4,052 73	3,923 74
Miscellaneous Expenses.....						
Total Expenses.....	7,291 80	9,657 80	4,382 08	6,016 45	12,721 10	14,448 39
Surplus.....	3,976 00	2,663 26	1,947 68	2,172 12	3,676 73	4,059 36
Loss.....						
Depreciation Charge.....	650 00	721 00	361 00	414 00	954 00	1,006 00
Surp. Less Depr. Chg.....	3,326 00	1,942 26	1,586 68	1,758 12	2,722 73	3,053 36

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Ayr xa 809		Ancaster xa Twp.		Baden xa 650		Beachville xa 504		Blenheim 1,533	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1,461 64	1,762 84	725 65	6,201 70	1,097 74	1,338 03	467 51	788 33	2,998 75	3,519 19
1,118 50	1,421 75	77 47	646 09	*	*	421 38	375 22	2,541 02	2,956 41
1,015 08	2,251 84	21 48	144 17	5,669 93	5,747 18	7,174 94	8,631 75	3,178 87	3,237 99
1,170 00	1,248 00	118 00	708 00	638 00	638 00	504 00	504 00	2,536 00	2,560 10
							52 52		
4,765 22	6,684 43	942 60	7,699 96	7,405 67	7,723 21	8,567 83	10351 82	11,254 64	12,273 69
1,943 81	2,979 68	344 14	2,357 59	4,935 91	5,356 87	5,873 73	7,754 08	5,446 75	5,813 80
107 64	117 23	200 00	389 94	306 17	116 40	55 69	143 51	343 11	1,058 82
103 57	78 20	16 42	143 72	69 53	36 31	115 31	60 32	203 44	312 20
799 36	488 55	203 27	1,261 43	305 30	404 62	225 49	424 78	781 52	832 85
1,114 78	1,119 31	58 40	1,616 85	44 95 186 68	153 51	176 05		1,150 71	1,116 18
4,069 16	4,782 97	822 23	5,769 53	5,848 54	6,067 71	6,446 27	8,382 69	7,925 53	9,133 85
696 06	1,901 46	120 37	1,930 43	1,557 13	1,655 50	2,121 56	1,969 13	3,329 11	3,139 84
454 00	496 00		1,075 00	397 00	420 00	471 00	504 00	857 00	938 00
242 06	1,405 46	120 37	855 43	1,160 13	1,235 50	1,650 56	1,465 13	2,472 11	2,201 84

* Domestic and Commercial Revenue combined.
xa Operated by Municipal Council.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality	Bolton		Bothwell		Brampton	
Population	xa	675	700		xb	4,238
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,285 93	1,450 23	1,359 99	1,706 75	8,818 83	9,746 87
Commercial Light.....	874 67	1,380 69	1,015 60	1,306 66	4,503 94	5,246 44
Power.....	2,812 67	4,060 05	591 48	223 65	14,403 89	13,536 96
Municipal Power.....						1,091 06
Street Light.....	840 00	900 69	1,133 05	1,146 96	3,916 22	4,035 33
Rural.....	1,012 18	1,035 06	5,700 00	6,425 00		
Miscellaneous.....					267 04	26 69
Total.....	6,825 45	8,826 72	9,800 12	10,809 02	31,909 92	33,683 35
Expenses						
Power Purchased.....	4,576 06	5,049 19	6,299 00	6,143 05	15,866 30	20,818 69
Sub-Stn. Operation.....					10 27	10 89
“ “ Maint’ce.....						
Dist. System, Operation and Maintenance.....	183 18	474 11	678 57	97 15	1,052 60	1,129 56
Line Transformer M’t’c’e.....					24 24	236 75
Meter Maintenance.....					187 13	255 91
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	30 66	80 03	52 66	45 05	320 01	468 13
Promotion of Business.....						
Billing and Collecting.....					1,115 38	1,441 71
Gen. Office, Sal. and Exp.....	504 59	298 58	286 24	324 72	2,275 02	2,199 55
Undistributed Expenses.....				12 18	92 73	76 22
Int. and Deb. Payments.....	1,214 14	1,301 84	1,557 64	1,320 51	3,775 97	3,577 07
Miscellaneous Expenses.....						
Total Expenses.....	6,508 63	7,203 75	8,874 11	7,942 66	24,719 65	30,214 48
Surplus.....	316 82	1,622 97	926 01	2,866 36	7,190 27	3,468 87
Loss.....						
Depreciation Charge.....	714 00	843 00	548 00	574 00	3,677 00	3,963 00
Surp. Less Depr. Chg.....	397 18	779 97	378 01	2,292 36	3,513 27	494 13

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Brantford xb 32,159		Brantford xa Twp.		Brigden xa z		Burford xa z		Burgessville xa z	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
34,615 20	44,754 95	5,325 01	6,277 87	625 14	862 91	1,330 31	2,023 41	423 05	593 18
10,632 25	10,398 10	611 75	670 44	1,080 00	1,384 25	1,064 23	1,194 81	127 43	147 91
51,469 32	47,091 53	2,950 19	4,226 65	3,289 96	4,868 59	543 25	279 34	643 88	688 75
	23,517 63								
24,264 27	23,557 89	2,573 87	2,131 25	962 50	1,043 75	601 34	752 00	361 00	361 00
4,318 51									
125,299 55	149,320 10	11,460 82	13,306 21	5,957 60	8,159 48	3,539 13	4,249 56	1,555 36	1,790 84
50,196 96	74,367 64	3,983 00	4,170 64	4,556 11	4,176 59	2,384 47	2,400 95	910 46	1,117 11
3,766 35	4,402 04								
399 67	426 66								
5,473 69	3,703 54	495 10	1,784 31	443 16	136 95	184 61	150 03		145 94
751 00	513 04								
314 28	4,207 07								
364 60	321 10								
7,301 99	7,481 18	237 70	264 06	22 00	94 70	42 75	42 92	8 25	20 25
1,626 50	2,684 53								
3,120 32	3,356 03								
4,662 15	5,629 11	1,510 93	2,034 66	185 19	439 36	356 54	452 18	33 52	3 68
2,584 96	5,801 83	225 00							
17,781 49	19,782 38	3,087 57	4,249 19	900 61	921 95	497 60	505 52	281 00	278 27
98,343 96	132,676 15	9,539 30	12,502 86	6,107 07	5,769 55	3,465 97	3,551 60	1,233 23	1,565 25
26,955 59	16,643 95	1,921 52	803 35		2,389 93	73 16	697 96	322 13	225 59
					149 47				
11,287 00	12,790 00	2,235 00	1,812 00	240 00	351 00	278 00	305 00	160 00	170 00
15,668 59	3,853 95	313 48	1,008 65	389 47	2,038 93	204 84	392 96	162 13	55 59

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM

Municipality Population	Caledonia		Chatham		Clinton	
	1,150		15,030		1,948	
	xa				xb	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	453 53	671 96	16,019 69	43,039 25	4,447 04	5,013 77
Commercial Light.....	907 76	1,155 64	12,994 41	27,592 06	3,044 93	3,586 69
Power.....	733 31	989 23	38,069 64	59,865 94	4,589 74	3,945 90
Municipal Power.....				2,963 14		706 41
Street Light.....	1,060 41	1,092 96	13,525 04	13,557 04	1,662 48	1,692 11
Rural.....				272 88		
Miscellaneous.....			592 89		299 05	268 82
Total.....	3,155 01	3,909 79	81,201 67	147,290 31	14,043 24	15,213 70
Expenses						
Power Purchased.....	1,214 54	1,596 05	34,534 66	67,557 26	5,467 30	7,271 67
Sub-Stn. Operation.....			3,081 43	5,009 34		
“ “ Maint’ce.....			425 37	1,240 23		
Dist. System, Operation and Maintenance.....	296 44	394 96	1,543 09	1,404 70	716 25	457 13
Line Transformer M’t’c’e.....			311 03	1,118 68		
Meter Maintenance.....			522 08	716 79		
Consumers’ Premises—Exp.....			106 86	187 58		
Street Light Sys., Operation and Maintenance.....	49 42	85 49	5,229 27	5,417 16	156 90	184 87
Promotion of Business.....			383 25			
Billing and Collecting.....			2,296 33	4,092 06		
Gen. Office, Sal. and Exp.....	114 25	176 84	7,778 74	9,012 79	1,517 29	1,708 93
Undistributed Expenses.....			808 92	3,156 61		
Int. and Deb. Payments.....	348 89	350 22	13,694 10	17,120 10	3,052 69	3,000 53
Miscellaneous Expenses.....						
Total Expenses.....	2,023 54	2,603 56	70,715 13	116,033 30	10,910 43	12,623 13
Surplus.....	1,131 47	1,306 23	10,486 54	31,257 01	3,132 81	2,590 57
Loss.....						
Depreciation Charge.....	400 00	445 00	6,017 50	7,682 00	1,240 00	1,356 00
Surp. Less Depr. Chg.....	731 47	861 23	4,469 04	23,575 01	1,892 81	1,234 57

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Comber xa z		Chippawa 1,095 c		Dashwood z		Delaware xa z		Dereham Twp. xa	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
740 75	958 81	208 67	2,078 72	462 51	578 84	457 11	852 14		
865 75	1,106 74	79 01	269 76	373 22	408 21	156 00	17 15		
	4,824 67			2,052 60	1,524 60				
792 00	875 04	288 00	1,152 00	738 00	738 00	294 83	378 00	6,410 65	6,749 17
2,398 50	7,765 26	575 68	3,500 48	3,626 33	3,249 65	907 94	1,247 29	6,410 65	6,749 17
1,973 45	4,770 69	255 21	760 70	2,428 56	2,456 59	703 77	603 70	1,974 74	2,011 61
210 97	278 70		257 79		7 50	12 57	13 73	1,023 01	986 07
40 58	48 50	16 52	539 05	38 94	67 02		14 00		
185 71	259 20	20 00	252 42	192 27	219 08	58 98	45 83	218 43	474 99
585 43	653 55	123 42	755 57	237 45	224 06	197 63	208 75	3,044 89	3,397 34
2,996 14	6,010 64	415 15	2,565 53	2,897 22	2,974 25	972 95	886 01	6,261 07	6,870 01
	1,754 62	160 53	934 95	729 11	275 40		361 28	149 58	
597 64						65 01			120 84
230 00	292 00		501 84	152 00	164 00	122 00	134 00		2,112 00
827 64	1,462 24	160 53	433 11	577 11	111 40	187 01	227 28	149 58	2,232 84

Italics denote losses.
xa Operated by Municipal Council.
“c” 3 months’ operation.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Dor- chester z		Drayton xa 622		Dresden 1,413	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,043 54	1,274 20	1,431 29	1,582 55	2,711 78	3,165 58
Commercial Light.....	281 20	345 51	973 25	1,250 48	2,730 58	2,941 56
Power.....	47 14	398 94	1,542 15	954 57	5,749 20	6,765 64
Municipal Power.....						
Street Light.....	378 00	493 00	1,080 00	1,080 00	1,665 00	1,682 00
Rural.....						
Miscellaneous.....			98 61		141 15	31 54
Total.....	1,749 88	2,511 65	5,125 30	4,867 60	12,997 71	14,586 32
Expenses						
Power Purchased.....	676 33	1,005 45	3,380 82	3,109 98	5,265 29	6,266 51
Sub-Stn. Operation.....						
" Maint'ce.....						
Dist. System, Operation and Maintenance.....	101 50	96 87	24 63	67 73	1,308 46	1,085 53
Line Transformer M't'c'e.....						
Meter Maintenance.....						
Consumers' Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	30 13	62 95	31 70	7 00	381 82	
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	204 12	202 58	176 60	164 00	493 76	613 21
Undistributed Expenses.....						
Int. and Deb. Payments.....	262 90	253 62	702 22	667 08	1,539 08	1,396 48
Miscellaneous Expenses.....						
Total Expenses.....	1,274 98	1,621 47	4,315 97	4,014 79	8,988 41	9,361 73
Surplus.....	474 90	890 18	809 33	852 81	4,009 30	5,224 59
Loss.....						
Depreciation Charge.....	240 00	273 00	376 00	393 00	627 00	683 00
Surp.'Less Depr. Chg.....	234 90	617 18	433 33	459 81	3,382 30	4,541 59

xa Operated by Municipal Council.

"z" Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Drumbo		Dublin		Dundas		Dunnville		Dutton	
xa	z	xa	z	xb	5,099	3,402		858	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
525 50	722 83	186 54	393 82	10,547 60	8,244 97	2,540 80	3,227 66	1,640 83	1,835 49
464 76	674 50	352 06	423 54	5,111 72	5,239 16	5,352 52	6,115 30	1,105 10	1,324 59
199 96	109 84	826 23	1,095 00	13,861 22	21,557 58	4,649 29	4,386 54	2,539 93	2,359 98
					167 66		1,446 01		
480 00	480 00	560 00	700 00	3,440 29	2,930 91	4,447 96	4,457 40	1,376 64	1,294 39
					2,309 18				
6 11	2 13			147 71	479 09	264 21	131 02	77 20	41 10
1,676 33	1,989 30	1,924 83	2,612 36	33,108 54	40,928 55	17,254 78	19,763 93	6,739 70	6,855 55
679 73	826 50	1,470 38	1,341 17	16,418 34	18,712 98	9,600 87	10,142 98	3,413 79	3,454 09
				48 55	127 52				
6 65	115 36	2 75	15 35	1,612 52	2,409 64	89 21	148 35	99 63	146 65
				176 01	312 16				
				288 76	296 91				
32 00	34 98	90 00	88 54	730 54	572 47	456 18	344 01	153 50	138 65
				1,809 38	2,076 25				
92 85	109 56	102 53	155 79	2,761 96	3,043 08	2,520 41	2,865 50	601 35	906 75
				2,021 09	2,955 67				
326 85	283 96	490 29	519 46	4,566 31	3,787 70	4,815 77	5,141 02	566 57	506 58
1,138 08	1,370 36	2,155 95	2,120 31	30,433 46	34,294 38	17,482 44	18,641 86	4,834 84	5,152 72
538 25	618 94		492 05	2,675 08	6,634 17		1,122 07	1,904 86	1,702 83
		231 12				227 66			
174 00	191 00	216 00	243 00	4,261 45	4,132 00	2,275 00	2,275 00	455 00	489 00
364 25	427 94	447 12	249 05	1,586 37	2,502 17	2,502 66	1,152 93	1,449 86	1,213 83

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Elmira xb 2,392		Elora xa 1,122		Embryo xa 481	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	3,206 49	4,582 08	1,809 72	2,087 52	873 32	1,189 47
Commercial Light.....	2,207 99	2,821 51	2,093 34	2,362 02	809 77	1,073 32
Power.....	4,621 96	5,893 58	7,440 12	6,997 35	979 29	1,722 08
Municipal Power.....		224 21				
Street Light.....	1,848 00	1,771 00	1,008 34	1,009 00	782 16	845 76
Rural.....				169 08	100 76	
Miscellaneous.....	3 51	592 49	333 57	505 03		1 28
Total.....	11,887 95	15,884 87	12,685 09	13,130 00	3,545 30	4,831 91
Expenses						
Power Purchased.....	5,938 47	7,534 73	6,194 52	6,748 21	2,197 83	3,064 83
Sub-Stn. Operation.....						
“ “ Maint’ce.....						
Dist. System, Operation and Maintenance.....	55 00	1,085 00	1,006 96	1,581 29	83 10	53 26
Line Transformer M’t’c’e.....						
Meter Maintenance.....						
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	128 90	166 11	105 00	147 25	50 88	75 35
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	1,736 41	1,558 53	706 00	871 57	257 61	257 32
Undistributed Expenses.....						
Int. and Deb. Payments.....	1,324 09	1,447 96	1,072 60	1,027 00	446 98	736 97
Miscellaneous Expenses.....						
Total Expenses.....	9,182 87	11,792 33	9,085 08	10,375 32	3,036 40	4,187 73
Surplus.....	2,705 08	4,092 54	3,600 01	2,754 68	508 90	644 18
Loss.....						
Depreciation Charge.....	1,118 00	1,248 00	776 00	870 00	366 00	387 00
Surp. Less Depr. Chg.....	1,587 08	2,844 54	2,824 01	1,884 68	142 90	257 18

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Etobicoke Twp.		Exeter		Fergus		Forest	
xa	z	1,431		xa	1,609	1,421	
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
11,905 18	17,352 35	2,806 26	3,402 65	2,629 72	3,030 75	3,307 14	4,406 18
1,567 41	1,985 92	2,383 33	2,558 70	2,699 88	2,775 01	2,187 64	2,696 04
5,010 68	5,078 76	4,159 40	4,353 17	3,573 66	3,522 57	4,076 79	4,216 26
3,431 10	3,741 99	2,748 96	2,562 48	1,662 48	1,640 33	2,849 88	2,852 56
		350 62	477 35			281 09	131 45
21,914 37	28,159 02	12,448 57	13,400 15	10,565 74	10,968 66	12,702 54	14,396 52
4,785 63	5,880 85	5,531 71	6,118 90	4,487 01	6,056 91	5,911 14	5,968 41
2,433 08	2,519 63	28 66	45 56	919 13	1,691 07	370 30	621 39
208 46	384 21	227 92	415 72	152 60	76 72	150 29	125 40
1,874 50	2,017 96	1,464 53	1,970 16	1,181 01	1,019 33	1,291 43	1,763 69
6,805 94	7,165 83	1,275 07	1,202 29	1,177 73	1,367 14	2,892 44	2,811 10
16,107 61	17,968 48	8,527 89	9,752 63	7,917 48	10,211 17	10,615 60	11,289 99
5,806 76	10,190 54	3,920 68	3,647 52	2,648 26	757 49	2,086 94	3,106 53
4,115 00	4,638 00	793 00	879 00	870 00	1,090 00	1,030 00	1,033 00
1,691 76	5,552 54	3,127 68	2,768 52	1,778 26	332 51	1,056 94	2,073 53

Italics denote losses.
xa Operated by Municipal Council.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Galt 12,434		Georgetown xa 2,010		Goderich xb 4,962	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	29,669 11	38,460 34	3,797 66	4,599 82	8,216 24	10,687 31
Commercial Light.....	13,856 90	17,575 07	2,428 41	3,276 91	5,317 77	6,367 10
Power.....	43,775 91	44,844 42	12,754 41	15,551 70	18,894 59	11,948 48
Municipal Power.....		4,315 01		149 42	...	4,602 48
Street Light.....	16,102 50	16,352 90	1,618 69	1,520 76	4,034 26	4,148 38
Rural.....			4,350 26	5,000 05	...	...
Miscellaneous.....	375 09	1,822 59		312 06	1,204 00	...
Total.....	103,779 51	123,370 33	24,949 43	30,410 72	37,666 86	37,753 75
Expenses						
Power Purchased.....	51,469 77	56,601 99	13,460 55	16,197 02	17,055 01	21,361 52
Sub-Stn. Operation.....	3,954 69	4,480 32			1,863 33	2,379 55
“ “ Maint’ce.....	168 42	492 20			...	...
Dist. System, Operation and Maintenance.....	1,419 88	953 00	1,871 45	2,677 90	688 62	1,214 66
Line Transformer M’t’c’e.....	133 00	123 82			86 59	448 87
Meter Maintenance.....	1,102 99	2,075 12			65 84	8 74
Consumers’ Premises—Exp.....					...	...
Street Light Sys., Operation and Maintenance.....	3,128 35	3,223 54	265 97	215 23	241 34	436 95
Promotion of Business.....					...	...
Billing and Collecting.....	3,245 12	3,282 63			884 81	915 33
Gen. Office, Sal. and Exp.....	5,116 72	6,354 68	1,150 27	1,342 00	1,030 88	1,726 79
Undistributed Expenses.....	1,325 68	866 27			247 29	298 52
Int. and Deb. Payments.....	15,069 18	15,583 60	1,787 76	1,422 26	4,881 62	4,668 00
Miscellaneous Expenses.....					...	...
Total Expenses.....	86,133 80	94,037 17	18,536 00	21,854 41	27,045 33	33,458 93
Surplus.....	17,645 71	29,333 16	6,413 43	8,556 31	...10,621 53	4,294 82
Loss.....					...	...
Depreciation Charge.....	10,882 00	11,959 00	1,869 00	2,031 00	3,685 00	3,956 00
Surp. Less Depr. Chg.....	6,763 71	17,374 16	4,544 43	6,525 31	6,936 53	338 82

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Glencoe	Guelph xc 17,032		Granton xa z		Grantham xi Township		Hagersville xa 1,058	
1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
630 50	25,157 62	30,371 10	661 90	886 41			1,808 19	2,132 34
675 34	15,487 44	19,523 95	265 43	407 45			1,400 40	1,611 37
130 68	54,810 39	58,091 84	1,321 67	1,562 80			6,863 75	9,129 99
		11,443 12						
768 75	9,419 84	9,145 47	480 00	480 00			1,066 72	941 70
					4,941 30	5,788 41		
	2,563 08	4,239 49					259 94	
2,205 27	107,438 37	132,814 97	2,729 00	3,336 66	4,941 30	5,788 41	11,399 00	13,815 40
1,065 03	53,489 84	71,075 42	1,878 56	2,040 89	1,102 27	1,234 59	5,737 90	7,350 94
	2,104 45							
		4,822 10						
82 37	2,398 01	6,746 40	38 23	20 30	531 79	479 76	442 60	618 58
	1,539 90	1,386 27						
	1,569 89	5,550 28						
	314 60							
22 19	2,590 16	2,995 56	38 50	100 75			33 55	131 40
	3,976 11	5,641 95						
145 77	5,765 56	5,632 98	104 28	129 32	442 08	365 62	867 28	977 77
	6,059 82	3,960 04						
37 39	10,273 28	7,650 88	290 16	286 05	2,915 07	3,034 31	550 80	335 66
1,352 75	90,081 62	45,461 88	2,349 73	2,577 31	4,991 21	5,114 28	7,632 13	9,414 35
852 52	17,356 75	17,353 09	379 27	759 35		674 13	3,766 87	4,401 05
					49 91			
	10,153 00	11,050 00	187 00	202 00	411 86	440 30	612 00	668 00
852 52	7,203 75	6,303 09	192 27	557 35	461 77	233 83	3,154 87	3,733 05

Italics denote losses.
xa Operated by Municipal Council.
xc Hydro and Gas under one Commission.
xi Operated by St. Catharines.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Hamilton 108,143		Harriston 1,381		Hensall xa 717	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	187,079 75	194,103 14	2,063 50	2,809 01	1,602 39	1,864 17
Commercial Light.....	44,372 46	44,501 23	1,828 60	2,377 90	886 86	1,083 89
Power.....	189,180 83	217,674 79	4,394 24	9,046 35	2,703 95	1,701 17
Municipal Power.....		30,595 96		663 23		74 88
Street Light.....	73,304 44	66,689 44	962 00	930 00	945 00	946 25
Rural.....		11,106 49				
Miscellaneous.....	6,713 39	13,899 80	343 08			
Total.....	500,650 87	578,570 85	9,591 42	15,826 49	6,138 20	5,670 36
Expenses						
Power Purchased.....	223,139 25	283,321 68	6,028 49	10,971 20	3,662 82	3,393 45
Sub-Stn. Operation.....	16,785 14	20,473 22				
“ “ Maint’ce.....	3,663 52	4,637 64				
Dist. System, Operation and Maintenance.....	12,807 84	14,156 32	813 95	864 24	91 48	135 43
Line Transformer M’t’c’e.....	5,043 60	5,231 61				
Meter Maintenance.....	11,818 19	13,024 44				
Consumers’ Premises—Exp.....	3,943 02	5,551 97				
Street Light Sys., Operation and Maintenance.....	11,131 31	9,658 71	141 55	112 51	170 86	275 78
Promotion of Business.....	5,304 27	5,685 49				
Billing and Collecting.....	27,744 95	28,944 19				
Gen. Office, Sal. and Exp.....	24,456 92	27,732 98	856 25	1,079 44	229 25	323 71
Undistributed Expenses.....	6,634 86	14,198 18				
Int. and Deb. Payments.....	72,018 85	74,613 98	1,193 80	1,564 56	810 65	872 92
Miscellaneous Expenses.....						
Total Expenses.....	424,491 72	507,230 41	9,034 04	14,591 95	4,965 06	5,001 29
Surplus.....	76,159 15	71,340 44	557 38	1,234 54	1,173 14	669 07
Loss.....						
Depreciation Charge.....	50,607 09	54,365 72	624 00	724 00	473 00	498 00
Surp. Less Depr. Chg.....	25,552 06	16,974 72	66 62	510 54	700 14	171 07

Italics denote losses.
xa Operated by Municipal Council.

“C”—Continued

Municipalities:for the years ending Dec. 31st, 1919 and 1920

Hespeler 2,998		Highgate xa z		Ingersoll xb 5,278		Kitchener xe 21,056	
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
4,286 70	5,626 85	618 65	861 91	9,214 11	11,307 12	31,643 49	39,506 53
2,194 16	2,414 32	598 12	738 31	6,229 81	6,419 44	20,095 87	25,744 25
6,554 78	7,780 26	2,071 70	1,675 62	22,036 72	22,767 78	112,988 89	117,559 59
	382 28				898 22		25,465 75
1,931 15	2,000 40	709 50	709 50	4,323 19	4,086 57	14,249 54	14,617 99
				689 58	780 40	5,467 87	3,427 83
14,966 79	18,204 11	3,997 97	3,985 39	42,493 41	46,259 53	184,445 66	226,321 94
7,207 66	8,922 09	2,657 49	2,466 02	19,665 01	24,478 35	101,117 84	130,187 39
1,199 56				968 92		6,089 45	7,787 62
	1,122 67				1,104 12	648 92	553 77
975 25	1,980 76	50 06	37 33	396 29	1,577 81	7,044 37	10,936 29
				130 82	38 82	579 66	295 79
167 82				243 10	202 11	903 55	3,060 08
279 37	140 71	24 17	95 53	895 19	1,003 91	4,755 47	3,870 42
						279 50	35 54
				1,288 91	1,791 04	3,873 74	4,443 88
1,737 69	1,942 76	128 88	171 46	1,718 17	2,035 10	3,569 28	4,834 64
112 50				1,338 68	2,506 57	4,590 42	3,784 90
2,625 57	2,709 36	346 41	326 21	3,367 94	3,345 53	18,463 08	15,676 40
14,305 42	16,818 35	3,207 01	3,096 55	30,013 03	38,083 36	151,924 28	185,466 32
661 37	1,385 76	790 96	888 84	12,480 38	8,176 17	32,521 38	40,855 62
1,620 00	1,800 00	256 00	274 00	3,720 00	3,825 00	15,625 00	17,357 00
958 63	414 24	534 96	614 84	8,760 38	4,351 17	16,896 38	23,498 62

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
xe Hydro, Gas and Railway under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality	Lambeth		Listowel		London	
Population	xa	z	xb		xb	
	2,437		59,100			
—	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	935 30	1,242 88	4,311 53	5,657 29	118,188 27	143,963 71
Commercial Light.....	289 64	339 28	2,971 08	3,884 08	67,190 65	76,450 76
Power.....			10,922 17	11,441 68	195,180 40	187,776 60
Municipal Power.....	309 87	312 00		1,702 10		23,304 59
Street Light.....	460 00	480 00	3,395 41	3,464 00	32,411 40	32,679 27
Rural.....						2,415 35
Miscellaneous.....					27,947 34	30,576 40
Total.....	1,994 81	2,374 16	21,600 19	26,149 15	440,918 06	497,166 68
Expenses						
Power Purchased.....	1,063 13	1,277 46	11,363 98	16,048 92	190,834 50	225,905 12
Sub-Stn. Operation.....					12,463 91	15,750 87
“ “ Maint’ce.....					1,042 93	1,400 28
Dist. System, Operation and Maintenance.....	61 44	60 40	1,357 52	1,036 61	5,183 29	8,220 18
Line Transformer M’t’c’e.....					4,187 89	2,894 12
Meter Maintenance.....					8,894 47	16,244 38
Consumers’ Premises—Exp.....					4,165 87	6,933 08
Street Light Sys., Operation and Maintenance.....	16 90	34 30	612 32	1,022 38	8,312 31	7,642 86
Promotion of Business.....					6,951 65	2,625 33
Billing and Collecting.....					14,334 22	18,507 43
Gen. Office, Sal. and Exp.....	138 39	107 88	2,604 04	3,312 07	25,527 13	26,863 70
Undistributed Expenses.....					17,970 13	26,708 72
Int. and Deb. Payments.....	320 08	331 26	3,794 00	3,480 95	54,286 08	60,816 15
Miscellaneous Expenses.....						
Total Expenses.....	1,599 94	1,811 30	19,731 86	24,900 93	354,154 38	420,512 22
Surplus.....	394 87	562 86	1,868 33	1,248 22	86,763 68	76,654 46
Loss.....						
Depreciation Charge.....	195 00	204 00	1,357 00	1,700 00	47,815 27	52,593 56
Surp. Less Depr. Chg.....	199 87	358 86	511 33	451 78	38,948 41	24,060 90

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Louth Township xa		Lucan 643		Lynden xa z		Milton 1,750		Milverton 929	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
		1,566 54	1,854 20	444 75	897 94	3,908 62	4,099 80	1,230 28	1,677 24
		921 25	885 18	347 65	435 63	2,041 31	2,365 05	1,442 81	1,494 72
		5,766 69	6,606 32	3,291 51	3,408 62	11,109 72	15,142 22	8,897 49	8,687 03
		951 50	928 68	355 00	472 50	2,004 00	1,906 45	1,094 92	1,105 20
515 24	608 61		64 50						
		31 07	37 82			1,032 52	888 15		
515 24	608 61	9,237 05	10,376 70	4,438 91	5,214 69	20,096 17	24,401 67	12,665 50	12,964 19
		3,629 62	5,577 59	3,449 50	3,794 56	12,103 36	17,960 50	8,126 01	9,395 97
15 00	215 85	493 57	1,089 56	25 07	12 83	1,731 83	1,733 43	173 26	235 65
		69 75	78 87	26 54	17 34	133 70	220 01	119 08	104 59
28 51	123 50	344 78	672 96	134 26	124 37	857 86	1,007 08	738 79	792 77
177 66	428 12	778 84	711 25	397 39	378 63	2,241 06	2,178 35	699 96	662 68
221 17	767 47	5,316 56	8,130 23	4,032 76	4,327 73	17,067 81	23,099 37	9,857 10	11,191 66
294 07		3,920 49	2,246 47	406 15	886 96	3,028 36	1,302 30	2,808 40	1,772 53
	158 86								
44 48	64 00	489 00	569 00	155 00	215 00	1,309 00	1,428 00	458 00	527 00
249 59	222 86	3,431 49	1,677 47	251 15	671 96	1,719 36	125 70	2,350 40	1,245 53

Italics denote losses.
xa Operated by Municipal Council.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Mimico 2,490		Mitchell xb 1,672		Mount Brydges xa z		Mark- ham
	1919	1920	1919	1920	1919	1920	1920
Earnings							
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	8,759 21	12,325 03	2,816 95	4,183 47	811 17	1,130 15	1,735 33
Commercial Light.....	1,061 76	1,305 90	3,136 32	3,588 97	324 11	434 78	790 25
Power.....	4,189 20	1,717 06	4,869 61	5,148 65	822 74	707 73	489 44
Municipal Power.....		2,179 24		650 00			88 35
Street Light.....	1,782 00	1,724 32	1,884 00	1,920 00	532 00	532 00	1,395 36
Rural.....							
Miscellaneous.....	41		669 96	717 40		15 12	
Total.....	15,792 58	19,251 55	13,376 84	16,208 49	2,490 02	2,819 78	4,498 73
Expenses							
Power Purchased.....	4,704 55	6,716 60	5,649 03	6,048 86	1,673 74	1,500 93	1,656 78
Sub-Stn. Operation.....			182 81				
“ “ Maint’ce.....				238 70			
Dist. System, Operation and Maintenance.....	2,339 96	2,631 22	1,495 44	741 30		8 18	446 30
Line Transformer M’t’c’e.....							
Meter Maintenance.....							
Consumers’ Premises—Exp.....							
Street Light Sys., Operation and Maintenance.....	415 73	567 52	346 11	166 25	17 19	19 38	64 11
Promotion of Business.....							
Billing and Collecting.....							
Gen. Office, Sal. and Exp.....	2,032 33	2,461 22	1,857 63	1,987 38	132 96	138 50	314 88
Undistributed Expenses.....							
Int. and Deb. Payments.....	1,977 50	1,944 99	1,725 90	1,788 30	290 36	272 43	665 28
Miscellaneous Expenses.....							
Total Expenses.....	11,470 07	14,321 55	11,256 92	10,970 79	2,114 25	1,939 42	3,147 35
Surplus.....	4,322 51	4,930 00	2,119 92	5,237 70	375 77	880 36	1,351 38
Loss.....							
Depreciation Charge.....	1,847 00	2,183 00	1,530 00	1,784 00	192 00	207 00	
Surp. Less Depr. Chg.....	2,475 51	2,747 00	589 92	3,453 70	183 77	673 36	1,351 38

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Moorefield		Niagara-on-the-Lake		Niagara Falls		New Hamburg	
xa	z		1,858		14,207	xa	1,356
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
341 45	498 92	1,015 63	5,544 75	33,221 90	46,839 29	2,597 55	2,987 68
342 50	431 99	568 17	2,796 38	12,639 15	15,366 86	1,540 57	1,615 92
1,292 62	1,262 83	350 67	1,301 68	24,686 72	23,292 38	5,517 79	5,613 62
					5,447 57		
437 00	475 00	625 00	2,393 75	12,443 88	12,636 48	1,827 00	1,827 00
						320 82	1,071 69
2,413 57	2,668 74	2,559 47	12,036 56	82,991 65	103,582 58	11,803 73	13,115 91
1,991 72	1,730 12	1,602 33	4,257 81	30,279 93	38,754 10	6,034 55	6,737 44
				6,395 43	5,365 89		
3 50	1 90	554 65	2,306 03	3,273 99	5,823 15	1,146 47	1,344 71
				204 63	170 15		
				1,821 37	2,225 32		
49 78	68 02	52 98	264 01	3,635 16	2,633 93	298 89	353 68
				3,431 21	4,242 79		
58 99	69 80	787 56	1,087 07	5,210 26	5,709 81	945 74	919 85
				3,065 37	3,918 95		
386 93	391 99		1,522 54	13,506 73	14,550 43	1,136 54	1,088 73
2,490 92	2,261 83	2,997 52	9,437 46	70,824 08	83,394 52	9,562 19	10,444 41
	406 91		2,599 10	12,167 57	20,188 06	2,241 54	2,671 50
77 35		438 05					
170 00	179 00		420 00	8,152 00	10,164 50	1,090 00	1,155 00
247 35	227 91	438 05	2,179 10	4,015 57	10,023 56	1,151 54	1,516 50

Italics denote losses.
xa Operated by Municipal Council.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	New Toronto xb 2,551		Norwich xb 1,262		Oil Springs xa 548	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	4,009 94	6,602 26	3,529 64	4,136 42	214 44	366 49
Commercial Light.....	3,143 60	2,979 37	1,566 15	1,915 42	173 97	319 75
Power.....	79,353 15	87,926 78	2,370 22	2,000 38	4,151 58	5,684 03
Municipal Power.....		9,345 35		902 09		
Street Light.....	925 38	956 88	1,609 50	1,641 00	740 04	740 04
Rural.....			7,645 15	9,794 89		
Miscellaneous.....	17 87	607 51		40 57		
Total.....	87,449 94	108,418 15	16,720 66	20,430 77	5,280 03	7,110 31
Expenses						
Power Purchased.....	60,061 08	84,628 66	5,594 32	7,274 43	4,235 34	4,206 09
Sub-Stn. Operation.....						
“ “ Maint’ce.....						
Dist. System, Operation and Maintenance.....	2,323 19	4,369 70	901 68	1,481 15	45 86	310 30
Line Transformer M’t’c’e.....			282 49			
Meter Maintenance.....			22 58	123 63		
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	458 96	161 77	140 24	285 56	14 49	20 64
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	2,226 32	2,956 83	515 06	988 84	281 95	268 22
Undistributed Expenses.....						
Int. and Deb. Payments.....			939 20	790 30	903 09	996 83
Miscellaneous Expenses.....			4,003 80	4,332 29		
Total Expenses.....	65,069 55	92,116 96	12,399 37	15,276 20	5,480 73	5,802 08
Surplus.....	22,380 39	16,301 19	4,321 29	5,154 57		1,308 23
Loss.....					200 70	
Depreciation Charge.....	1,648 00	1,905 00	775 00	812 00	373 00	443 00
Surp. Less Depr. Chg.....	20,732 39	14,396 19	3,546 29	4,342 57	573 70	865 23

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Otterville xa z		Palmerston xb 1,815		Paris xb 4,866		Petrolia 2,954		Plattsville xa z	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
861 40	1,156 08	3,253 16	4,283 77	7,447 39	7,696 27	5,024 22	6,034 68	795 79	969 31
440 31	648 41	3,344 29	4,036 64	4,436 78	4,411 23	4,761 37	5,447 61	826 27	873 81
982 80	1,770 64	2,161 21	2,333 25	14,226 43	16,414 88	16,712 15	19,193 71	3,053 72	3,155 32
			901 85		1,225 00				
327 00	342 00	1,590 00	1,631 25	4,576 00	4,642 00	3,407 43	3,442 83	561 00	576 00
		1,146 79	1,126 84	19 70		1,270 84	2,444 19		27 15
2,611 51	3,917 13	11,495 45	14,313 60	30,706 30	34,389 38	31,176 01	36,563 02	5,236 78	5,601 59
973 66	1,482 04	4,077 59	5,477 12	10,547 99	13,643 00	13,245 72	14,819 20	3,251 18	3,704 74
				1,409 82	1,323 71				
40 45	36 24	282 32	477 61	2,596 84	3,371 11	783 97	1,927 96	43 95	166 00
				3 15		154 34	302 15		
				29 45	526 44	31 65	189 49		
50 06		263 30	319 27	435 54	596 31	232 13	42 07	43 43	32 00
				11 30	431 49				
160 80	169 94	1,045 28	1,179 90	795 62	887 19	3,161 22	3,534 97	136 71	170 65
				780 64	464 90	928 77	1,282 61		
388 84	375 89	2,063 68	2,040 43	6,412 20	6,247 88	4,003 24	3,873 05	442 96	366 35
1,613 81	2,064 11	7,732 17	9,494 33	23,022 55	27,492 03	22,541 04	25,971 50	3,918 23	4,439 74
997 70	1,853 02	3,763 28	4,819 27	7,683 75	6,897 35	8,634 97	10,591 52	1,318 55	1,161 85
219 00	263 00	798 00	889 00	3,380 00	3,676 00	2,205 00	2,414 00	198 00	221 00
778 70	1,590 02	2,965 28	3,930 27	4,303 75	3,221 35	6,429 97	8,177 52	1,120 55	940 85

Italics denote losses,
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality	Parkhill		Port Credit xa 1,100		Port Dalhousie 1,391		Port Stanley xa 732	
Population								
	1920	1919	1920	1919	1920	1919	1920	
Earnings								
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,530 39	2,459 05	3,173 10	3,620 82	4,055 23	4,433 44	5,003 83	
Commercial Light.....	1,106 09	669 12	1,164 86	1,155 84	1,059 28	1,973 57	1,696 00	
Power.....		245 57	406 02	948 66	1,234 39	2,996 19	4,936 32	
Municipal Power.....	110 15						387 95	
Street Light.....	1,452 50	1,075 00	1,210 00	850 00	1,064 00	1,599 00	1,677 00	
Rural.....								
Miscellaneous.....							411 27	
Total.....	4,199 13	4,448 74	5,953 98	6,575 32	7,412 90	11,002 20	14,112 37	
Expenses								
Power Purchased.....	1,948 86	1,527 01	2,135 05	2,294 27	2,824 98	6,032 75	7,065 21	
Sub-Stn. Operation.....								
“ “ Maint’ce.....								
Dist. System, Operation and Maintenance.....	7 50	395 83	457 80	1,674 82	1,862 20	410 17	2,298 49	
Line Transformer M’t’c’e.....								
Meter Maintenance.....								
Consumers’ Premises—Exp.....								
Street Light Sys., Operation and Maintenance.....	90 65	86 11	137 78	292 61	177 11	192 38	165 61	
Promotion of Business.....								
Billing and Collecting.....								
Gen. Office, Sal. and Exp.....	257 40	843 09	847 76	394 76	436 43	1,750 84	2,268 90	
Undistributed Expenses.....								
Int. and Deb. Payments.....	687 35	502 33	493 23	1,375 49	1,329 35	1,233 24	776 95	
Miscellaneous Expenses.....								
Total Expenses.....	2,991 76	3,354 37	4,071 62	6,031 95	6,630 07	9,619 38	12,575 16	
Surplus.....	1,207 37	1,094 37	1,882 36	543 37	782 83	1,382 82	1,537 21	
Loss.....								
Depreciation Charge.....		605 00	674 00	579 00	613 00	863 00	969 00	
Surp. Less Depr. Chg.....	1,207 37	489 37	1,208 36	35 63	169 83	519 82	568 21	

Italics denote losses.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Port Colborne	Preston xb 5,184		Princeton xa z		Ridgetown xb 2,180		Rockwood xa z	
	1919	1920	1919	1920	1919	1920	1919	1920
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
4,301 69	9,715 90	11,667 41	845 12	1,104 05	3,364 53	4,054 63	1,023 14	1,382 39
3,082 14	6,320 68	7,902 05	229 56	339 38	2,911 80	3,474 32	384 46	408 73
2,718 09	24,520 93	29,115 21			4,510 09	4,482 28	1,177 94	1,310 28
		780 00				767 03		
1,200 00	3,052 69	3,290 23	380 00	420 00	2,696 91	2,511 46	528 00	586 02
	3,564 74	3,569 50						
		3 40			1,109 85	611 41		
11,301 92	47,174 94	56,327 80	1,454 68	1,863 43	14,593 18	15,901 13	3,113 54	3,687 42
3,860 24	24,808 19	30,575 23	939 54	1,140 19	5,394 03	6,591 24	2,102 34	2,315 39
	2,825 77	3,686 28						
	350 21	154 25						
1,369 03	1,627 41	2,973 90	20 57	58 85	725 28	770 63	119 67	58 03
	247 63	153 57						
	567 86	366 72						
		57 07						
62 65	370 25	257 46	11 35	19 00	412 42	439 31	33 81	17 38
	1,487 41	1,805 07						
1,637 85	1,973 23	2,027 01	89 15	75 27	1,071 02	1,088 07	383 80	408 99
	1,419 93	1,267 28						
3,395 63	7,487 72	7,591 82	273 98	288 01	1,600 92	1,506 78	348 21	342 71
10,325 40	43,165 61	50,915 66	1,334 59	1,581 32	9,203 67	10,396 03	2,987 83	3,142 50
976 52	4,009 33	5,412 14	120 09	282 11	5,389 51	5,505 10	125 71	544 92
	4,938 00	5,390 00	135 00	139 00	855 00	940 00	342 00	376 00
976 52	928 67	22 14	14 91	143 11	4,534 51	4,565 10	216 29	168 92

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Rodney xa 656		St. George xa z		St. Jacobs xa z		St. Marys
	1919	1920	1919	1920	1919	1920	1919
Earnings							
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,050 66	1,516 38	1,399 56	1,390 96	615 87	742 62	8,046 60
Commercial Light	1,124 65	1,373 38	595 23	711 98	517 40	494 93	3,526 28
Power.....	1,657 98	1,506 77	2,254 91	2,010 01	2,031 33	2,431 32	8,996 31
Municipal Power.....							
Street Light.....	1,245 75	1,254 00	495 00	495 00	560 00	560 00	4,449 00
Rural.....				236 75			
Miscellaneous.....	6 20	1 59				5 50	305 10
Total.....	5,085 24	5,652 12	4,744 70	4,844 70	3,724 60	4,234 37	25,323 29
Expenses							
Power Purchased.....	2,547 02	2,379 44	2,489 90	2,201 20	1,943 93	2,075 55	14,503 23
Sub-Stn. Operation.....							1,018 57
“ “ Maint’ce.....							
Dist. System, Operation and Maintenance.....	52 71	180 74	116 47	34 44	6 26		534 66
Line Transformer M’t’c’e.....							175 26
Meter Maintenance.....							167 09
Consumers’ Premises—Exp.....							
Street Light Sys., Operation and Maintenance.....	28 17	68 17	20 70	20 50	23 42	13 81	354 32
Promotion of Business.....							
Billing and Collecting.....							246 23
Gen. Office, Sal. and Exp.....	329 55	347 93	248 92	280 70	156 21	257 40	1,614 85
Undistributed Expenses.....							528 45
Int. and Deb. Payments.....	611 17	572 99	384 94	288 68	497 58	496 49	4,906 43
Miscellaneous expenses.....							
Total Expenses.....	3,568 62	3,549 27	3,260 93	2,825 52	2,627 40	2,843 25	24,049 09
Surplus.....	1,516 62	2,102 85	1,483 77	2,019 18	1,097 20	1,391 12	1,274 20
Loss.....							
Depreciation Charge.....	344 00	397 00	231 00	260 00	246 00	259 00	3,408 00
Surp.Less Depr. Chg.....	1,172 62	1,705 85	1,252 77	1,759 18	851 20	1,132 12	2,133 80

Italics denote losses.
xa Operated by Municipal Council.
“z” Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

St Marys	St. Catharines xc 19,195		St. Thomas 17,759		Sarnia 12,649		Springfield z	
	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
9,598 64	36,710 19	46,123 30	29,904 22	34,279 28	33,920 44	44,174 44	900 59	961 07
4,593 72	7,401 09	8,930 44	14,958 16	19,489 14	22,668 63	28,041 43	635 08	697 17
14,104 93	48,616 67	60,203 89	54,035 16	47,180 88	68,714 03	100,632 53	545 33	648 72
1,392 34				6,502 01				
4,449 00	14,423 73	14,441 58	14,117 40	14,238 54	13,214 47	13,412 80	800 00	800 00
				4,781 17	8,731 62	6,689 49	387 93	365 51
246 97	838 24	1,675 45	3,337 61	329 13		3,396 42		
34,385 60	107,989 92	131,374 64	116,352 55	126,800 15	147,249 19	196,346 81	3,268 93	3,472 47
20,326 52	43,151 18	54,851 62	54,397 28	58,936 05	66,254 03	85,966 39	1,594 80	1,814 34
1,209 64	2,798 18	3,389 53	4,753 95	5,688 73	4,093 74	5,378 50		
	31 71	97 59	541 04	128 30	380 05	184 44		
983 38	4,638 46	5,298 18	4,886 25	6,319 25	4,078 14	3,537 70	235 31	102 09
446 24	1,003 12	150 28	249 82	1,694 60	326 57	977 20		
407 90	682 15	1,586 22	629 37	1,231 86	158 79	379 35		
			281 61	437 40				
571 76	3,395 68	3,236 41	3,107 89	4,203 39	1,905 29	2,380 95	111 10	30 91
	3,118 14	2,597 44	425 18					
256 07	3,730 68	4,708 45	2,519 42	3,024 34	2,521 99	3,105 75		
1,969 70	8,682 31	8,194 44	2,890 17	3,127 25	5,419 44	7,036 17	189 50	164 56
731 25	1,992 35	2,124 70	10,052 33	4,784 78	10,456 96	12,408 66		
4,794 07	16,036 05	15,526 58	10,170 92	6,870 11	18,194 56	19,961 44	882 60	1,022 46
31,696 53	89,260 01	101,761 44	87,853 58	96,446 06	113,789 56	141,316 55	3,013 31	3,134 36
2,689 07	18,729 91	29,613 20	28,498 97	30,354 09	33,459 63	55,030 26	255 62	338 11
3,775 00	10,989 00	12,794 00	10,879 00	12,069 00	9,145 00	10,141 00		
1,085 93	7,740 91	16,819 20	17,619 97	18,285 09	24,314 63	44,889 26	255 62	338 11

Italics denote losses.
xc Hydro and Gas under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality	Seaforth		Simcoe		Stratford	
Population	2,027		3,818		xb 18,106	
—	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	4,209 20	4,606 78	2,237 23	2,960 86	35,342 84	41,679 50
Commercial Light.....	3,460 97	3,764 88	4,431 49	5,036 58	17,330 26	19,050 82
Power.....	12,054 95	9,860 95	2,766 80	2,310 35	26,420 07	30,807 49
Municipal Power.....				546 55		4,115 58
Street Light.....	1,848 00	1,718 47	4,056 64	3,807 51	15,563 15	15,141 31
Rural.....						2,189 42
Miscellaneous.....	251 10	438 07			2,061 58	555 89
Total.....	21,824 22	20,389 15	13,492 16	14,661 85	96,717 90	113,540 01
Expenses						
Power Purchased.....	11,207 77	12,783 27	3,787 32	4,416 40	37,258 60	48,593 60
Sub-Stn. Operation.....				302 40	2,889 36	3,775 06
“ “ Maint’ce.....					1,153 68	247 51
Dist. System, Operation and Maintenance.....	2,503 72	1,828 12	1,186 30	1,343 54	6,677 48	6,600 35
Line Transformer M’t’c’e.....			25 40	25 95	269 61	620 80
Meter Maintenance.....			6 50		405 17	1,191 10
Consumers’ Premises—Exp.....					470 60	
Street Light Sys., Operation and Maintenance.....	323 27	247 37	57 53	160 48	2,271 64	4,809 61
Promotion of Business.....						
Billing and Collecting.....					2,756 76	2,975 40
Gen. Office, Sal. and Exp.....	726 32	815 09	509 62	808 31	1,545 01	1,636 68
Undistributed Expenses.....			10 40		3,327 69	3,476 40
Int. and Deb. Payments.....	1,321 82	1,108 14	1,653 81	1,552 73	17,846 79	17,625 66
Miscellaneous Expenses.....						
Total Expenses.....	16,082 90	16,781 99	7,236 88	8,609 81	76,872 39	91,552 17
Surplus.....	5,741 32	3,607 16	6,255 28	6,052 04	19,845 51	21,987 84
Loss.....						
Depreciation Charge.....	1,835 00	1,963 00	1,364 00	1,544 00	11,376 00	11,951 00
Surp. Less Depr. Chg.....	3,906 32	1,644 16	4,891 28	4,508 04	8,469 51	10,036 84

xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Stamford Township xa		Strathroy xb 2,637		Scarboro' Township xa		Tavistock xb 917		Thamesford xa z	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c. 3,798 04	\$ c. 6,951 53	\$ c. 5,589 48	\$ c. 6,891 04	\$ c. 6,010 65	\$ c. 9,936 12	\$ c. 1,442 02	\$ c. 1,806 64	\$ c. 820 10	\$ c. 1,030 02
*	*	4,228 41	5,037 74	*	.....	991 26	1,015 70	819 62	980 63
9,624 55	7,276 54	7,064 29	9,628 47	.....	3,083 31	10,133 62	8,503 06	3,727 03	3,852 98
.....	.....	.....	1,563 96	.....	.....	.....	90 88	.....	.....
1,232 56	1,236 89	4,704 29	4,257 20	1,448 00	1,656 50	1,315 94	1,370 04	544 00	578 00
.....
30 39	.....	492 40	2,030 72	.....	.....	81 32	.....	52	14 24
14,685 54	15,464 96	22,078 87	29,409 13	7,458 65	14,675 93	13,964 16	12,786 32	5,911 27	6,455 87
.....
5,573 01	5,468 99	8,661 03	12,122 08	1,051 09	3,722 74	8,242 45	8,472 75	3,348 87	3,589 17
.....
2,381 78	2,997 98	538 78	372 87	304 62	1,731 58	61 69	62 65	68 33	281 56
.....
145 25	240 73	406 43	481 09	54 30	164 26	50 45	24 18	70 47	77 92
.....
892 34	1,303 56	2,391 21	2,937 00	631 53	1,517 22	677 32	569 22	151 87	198 93
.....	.....	.....	.....	.....	.....	6 73	10 14	.....	.....
2,972 06	2,190 90	3,580 08	3,452 49	5,019 30	5,284 95	235 42	31 89	468 79	524 96
.....
11,964 44	12,202 16	15,577 53	19,365 53	7,060 84	12,420 75	9,274 06	9,170 83	4,108 33	4,672 54
2,721 10	3,262 80	6,501 34	10,043 60	397 81	2,255 18	4,690 10	3,615 49	1,802 94	1,783 33
.....
1,260 00	1,905 50	1,772 00	2,073 00	689 00	2,394 00	420 00	469 00	340 00	355 00
1,461 10	1,357 30	4,729 34	7,970 60	291 19	138 82	4,270 10	3,146 49	1,462 94	1,428 33

Italics denote losses.
* Domestic and Commercial Revenue combined.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Thamesville xa 808		Thorndale xa z		Tilbury 1,623		Tillson- burg
	1919	1920	1919	1920	1919	1920	1919
Earnings							
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,672 09	2,293 54	539 94	716 05	1,918 60	2,372 09	4,971 07
Commercial Light.....	1,242 00	1,783 72	560 55	715 49	2,279 49	2,648 21	5,573 12
Power.....		199 80	2,337 09	3,455 34	1,889 69	1,711 87	23,917 76
Municipal Power.....							
Street Light.....	1,065 00	1,200 00	442 00	442 00	915 00	915 00	2,651 00
Rural.....							
Miscellaneous.....	496 89						1,029 05
Total.....	4,475 98	5,477 06	3,879 58	5,328 88	7,002 78	7,647 17	38,142 00
Expenses							
Power Purchased.....	2,441 23	2,653 26	2,519 53	3,942 78	3,848 49	3,635 27	19,052 28
Sub-Stn. Operation.....							957 98
“ “ Maint’ce.....							
Dist. System, Operation and Maintenance.....	316 95	59 04	134 36	75 90	53 25	114 24	659 88
Line Transformer M’t’c’e.....							34 28
Meter Maintenance.....							95 10
Consumers’ Premises—Exp.....							
Street Light Sys., Operation and Maintenance.....	79 05	67 72	37 32	89 90	43 40	76 75	424 84
Promotion of Business.....							19 06
Billing and Collecting.....							608 57
Gen. Office, Sal. and Exp.....	9 74	379 50	181 07	121 01	1,205 96	1,275 23	1,698 97
Undistributed Expenses.....						4 38	294 42
Int. and Deb. Payments.....	913 60	910 10	351 48	320 36	1,233 33	1,246 93	2,459 01
Miscellaneous Expenses.....							
Total Expenses.....	3,760 63	4,069 62	3,223 76	4,549 95	6,384 43	6,352 80	26,304 39
Surplus.....	715 35	1,407 44	655 82	778 93	618 35	1,294 37	11,837 61
Loss.....							
Depreciation Charge.....	431 00	494 00	159 00	185 00	478 00	494 00	2,473 00
Surp. Less Depr. Chg.....	284 33	913 44	496 82	593 93	140 35	800 37	9,364 61

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Tillson- burg	Toronto 499,278		Toronto Township xa		Vaughan Township xa		Walkerville s 10,799	
1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
6,417 45	560,912 02	729,364 33			549 48	763 80	34,159 82	40,884 48
6,077 79	382,167 17	533,987 42			150 03	152 45	18,045 74	22,432 85
18,378 45	1144,453 76	1164,782 90			1,972 79	2,059 19	84,601 16	109,892 78
		270,979 71						
2,651 00	322,773 70	335,369 74			238 00	238 00	5,327 50	3,692 33
			14,456 15	18,641 08	430 53	648 08		35,558 10
1,220 58	55,987 17	56,138 59					7,046 05	4,990 06
34,745 27	2466,293 82	3090,622 69	14,456 15	18,641 08	3,340 83	3,861 52	149,180 27	217,450 60
17,481 57	812,867 47	974,827 92	4,174 29	4,911 00	1,566 73	1,817 38	70,203 88	117,586 40
1,050 76	62,234 55	100,154 93					3,728 82	5,953 66
	58,818 38	62,283 90					144 87	828 76
918 35	71,777 82	69,566 75	1,342 79	2,526 98	191 84	26 00	2,178 73	4,716 02
	20,830 54	15,816 45					467 51	1,065 88
472 73	28,779 21	43,855 65					1,601 16	3,145 18
	72,678 80	99,996 09						
297 86	78,266 13	84,238 51			31 00		737 50	2,435 42
13 61	45,659 05	54,557 86						
535 25	96,868 91	129,862 46					3,982 33	4,858 58
2,932 50	152,546 24	208,804 44	1,119 86	1,152 46	87 80	152 70	7,612 00	9,409 78
439 36	57,725 21	97,963 99					4,321 25	7,094 57
2,294 46	543,831 81	654,745 10	3,946 51	3,979 26	2,482 46	2,544 48	12,367 58	13,703 57
	18,831 33							
26,436 45	2121,715 45	2596,674 05	10,583 45	12,569 70	4,349 83	4,540 56	107,345 63	170,797 82
8,308 82	344,578 37	493,948 64	3,982 70	6,071 38			41,834 64	46,652 78
					1,009 00	679 04		
2,731 00	340,427 05	371,221 00	3,175 00	3,864 00	306 00	307 00	8,880 25	9,624 00
5,577 82	4,151 32	122,727 64	807 70	2,207 38	1,315 00	986 04	32,954 39	37,028 87

Italics denote losses.
xa Operated by Municipal Council.
“s” Includes Sandwich and Ford.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Wallaceburg xb 4,067		Waterdown xa 790		Waterford xa 965	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	8,825 29	11,021 73	1,828 47	2,167 44	1,874 15	2,503 53
Commercial Light.....	5,366 66	7,115 48	595 30	609 00	1,003 75	977 72
Power.....	25,597 73	30,913 84	1,401 58	1,487 72	3,921 69	3,345 94
Municipal Power.....		1,322 65				
Street Light.....	3,396 38	3,567 12	600 00	600 00	1,258 20	1,177 00
Rural.....			2,637 51	3,658 44	746 80	714 05
Miscellaneous.....	991 67	1,001 13				8 81
Total.....	44,177 73	54,941 95	7,062 86	8,522 60	8,804 59	8,727 05
Expenses						
Power Purchased.....	20,856 38	26,426 93	2,705 40	3,342 48	3,226 72	3,789 51
Sub-Stn. Operation.....	30 82					
“ “ Maint’ce.....		144 27				
Dist. System, Operation and Maintenance.....	346 86	618 36	780 37	230 61	198 23	294 53
Line Transformer M’t’c’e.....	143 80	219 12				
Meter Maintenance.....	148 08	55 81				
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	403 48	1,203 13	77 02	42 47	69 20	260 60
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	3,280 39	3,425 53	607 85	688 60	443 57	589 44
Undistributed Expenses.....	381 30	237 55				
Int. and Deb. Payments.....	5,006 60	4,066 90	1,360 44	1,335 99	1,760 69	1,684 79
Miscellaneous Expenses.....						
Total Expenses.....	30,597 71	36,397 60	5,531 08	5,640 15	5,698 41	6,618 87
Surplus.....	13,580 02	18,544 35	1,531 78	2,882 45	3,106 18	2,108 18
Loss.....						
Depreciation Charge.....	2,476 00	2,628 00	1,140 00	1,211 00	686 00	740 00
Surp. Less Depr. Chg.....	11,104 02	15,916 35	391 78	1,671 45	2,420 18	1,368 18

xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Waterloo xd 5,476		Watford xa 1,075		Welland 9,135		Wellesley xa z		West Lorne	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
8,771 46	11,943 47	1,905 65	2,332 72	11,262 98	14,065 49	747 84	857 83	991 90	1,286 61
5,347 03	5,488 04	1,779 86	2,160 32	3,678 46	5,126 13	524 60	524 94	873 46	1,253 45
23,399 07	23,423 98	2,154 95	2,305 80	63,555 85	55,825 21	4,253 22	4,180 31	360 44	4,838 27
	3,587 14								
5,723 59	5,697 47	1,569 99	1,592 94	5,428 53	5,478 50	733 11	732 74	1,402 50	1,402 50
	1,497 14				12,299 52				
2,243 89	803 00		3 69	421 48	1,936 96				
45,485 04	52,440 24	7,410 45	8,395 47	84,347 20	94,732 81	6,258 77	6,295 82	3,628 30	8,780 83
21,029 45	24,149 70	4,554 15	4,930 40	43,959 12	46,965 89	3,957 48	4,293 85	1,271 40	3,600 75
1,635 63	2,200 08			2,913 25	3,106 40				
148 03				86 31	314 43				
2,208 08	2,612 99	98 54	131 20	2,632 37	2,114 91	83 16	59 83	63 24	86 53
118 77	16 14			494 63	655 12				
327 04	459 57			211 55	515 42				
1,845 23	2,517 10	169 40	55	783 83	1,906 63	51 70	75 17	34 75	83 42
1,423 23	2,034 10			1,372 66	1,214 64				
3,961 70	5,128 21	333 64	463 76	6,658 90	7,023 13	420 32	395 49	356 51	478 39
371 73	559 44			4,026 35	4,721 16				
3,572 84	4,142 19	923 41	973 76	14,054 04	15,873 25	606 09	572 46	564 14	601 68
36,641 73	43,819 52	6,079 14	6,499 67	77,193 01	84,410 98	5,118 75	5,396 80	2,290 04	4,850 77
8,843 31	8,620 72	1,331 31	1,895 80	7,154 19	10,321 83	1,140 02	899 02	1,338 26	3,930 06
5,144 00	6,334 33	469 00	514 00	8,545 00	9,736 00	305 00	326 00	310 00	392 00
3,699 31	2,286 39	862 31	1,381 80	1,380 81	585 83	835 02	573 02	1,028 26	3,538 06

Italics denote losses.
xa Operated by Municipal Council.
xd Hydro, Gas and Water under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

NIAGARA
SYSTEM—Continued

Municipality Population	Weston xb 2,495		Windsor 31,629		Woodbridge	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	7,453 63	9,047 65	78,038 66	144,249 01	905 44	1,053 78
Commercial Light.....	1,819 82	2,125 38	27,032 01	75,244 64	628 07	672 50
Power.....	20,861 85	23,289 63	39,468 90	151,986 78	4,167 78	5,716 29
Municipal Power.....		1,820 38		4,941 73		
Street Light.....	3,154 90	2,680 00	38,430 02	36,425 54	925 00	887 00
Rural.....		1,106 63		21,600 49		94 71
Miscellaneous.....	46 76	47 80	5,897 69	8,306 63		
Total.....	33,336 96	40,117 47	188,867 28	442,754 82	6,626 29	8,424 28
Expenses						
Power Purchased.....	17,756 92	22,091 04	72,768 55	191,423 61	2,682 56	4,790 94
Sub-Stn Operation.....			4,509 09	26,352 93		
“ “ Maint’ce.....			2,840 22	9,410 93		
Dist. System, Operation and Maintenance.....	2,615 32	2,850 71	6,361 17	12,253 28	101 40	140 14
Line Transformer M’t’c’e.....			1,171 17	5,717 82		
Meter Maintenance.....			352 01	3,241 48		
Consumers’ Premises—Exp.....			1,838 47	2,799 23		
Street Light Sys., Operation and Maintenance.....	173 46	253 50	12,498 40	14,714 43	142 94	79 23
Promotion of Business.....			672 63	397 11		
Billing and Collecting.....			7,621 94	13,311 57		
Gen. Office, Sal. and Exp.....	1,514 67	2,072 48	9,209 58	14,528 08	309 57	263 22
Undistributed Expenses.....	73 00	73 00	6,150 95	14,328 74		
Int. and Deb. Payments.....	1,862 01	1,061 96	25,366 86	37,703 79	556 44	480 50
Miscellaneous Expenses.....						
Total Expenses.....	23,995 38	28,402 69	151,361 04	346,183 00	3,792 91	5,754 03
Surplus.....	9,341 58	11,714 78	37,506 24	96,571 82	2,833 38	2,670 25
Depreciation Charge.....	2,496 00	3,056 00	12,737 40	15,771 00	498 00	630 00
Surp. Less Depr. Chg.....	6,845 58	8,658 78	24,768 84	80,800 82	2,335 38	2,040 25

xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Woodstock xb 10,126		Wyoming xa 495		Zurich xa z		TOTALS	
1919	1920	1919	1920	1919	1920	1919	1920
						121	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
14,748 02	22,542 71	777 48	1,116 01	878 22	881 70	1,592,003 68	2,070,212 09
12,452 68	14,832 22	637 26	953 51	766 98	991 52	877,136 77	1,174,845 34
24,473 54	23,954 56	73 10	665 29	2,710 24	2,773 80	2,858,106 81	3,163,337 61
	3,093 93	...	...	...	...	...	456,906 43
7,298 16	7,241 75	768 00	960 00	1,130 00	1,080 00	789,541 28	800,314 08
	352 91	...	...	...	...	66,117 87	165,806 43
92 27	1,788 23	...	...	...	...	135,703 35	151,183 06
59,064 67	73,806 31	2,255 84	3,694 81	5,485 44	5,727 02	6,318,609 83	7,982,614 04
25,206 99	34,269 52	1,671 93	1,957 86	3,172 71	3,424 54	2,585,939 55	3,344,747 49
2,964 21	3,634 16	...	...	...	...	157,638 48	232,866 51
226 88	154 40	...	...	...	...	71,118 76	90,114 27
3,051 04	3,871 57	22 96	174 64	2 20	9 70	207,031 95	255,115 28
21 46	47 40	...	...	...	...	39,187 92	40,678 80
529 80	411 33	...	...	...	...	62,507 22	106,027 03
...	...	...	...	...	...	84,301 24	116,283 52
980 69	1,196 51	...	69 44	136 89	81 79	167,350 05	184,158 15
...	...	...	...	...	...	64,439 23	68,596 91
2,348 43	3,388 89	...	...	...	...	194,620 34	250,247 35
3,452 59	4,339 10	256 61	155 48	300 60	312 20	365,031 26	461,113 40
1,491 17	1,333 50	...	21 48	...	...	163,431 71	220,273 30
4,386 22	5,075 78	606 97	641 39	348 42	312 11	1,043,994 45	1,184,802 94
...	...	...	...	...	...	4,003 80	6,083 04
44,659 48	57,722 16	2,558 47	3,020 29	3,960 82	4,140 34	5,210,595 96	6,561,107 99
14,405 19	16,084 15	...	674 52	1,524 62	1,586 68	1,108,013 87	1,421,506 05
...	...	302 63	...	...	...	...	...
7,055 00	8,131 00	313 00	344 00	243 00	262 00	685,623 35	761,504 75
7,350 19	7,953 15	615 63	330 52	1,281 62	1,324 68	422,390 52	660,001 30

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

THUNDER BAY SYSTEM			SEVERN SYSTEM			
Municipality	Port Arthur		Alliston		Barrie	
Population	xf	15,094	1,224	6,775		
	1919	1920	1919	1920	1919	1920
Earnings	1					
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	41,584 37	45,432 34	3,084 19	4,255 43	12,395 37	14,459 88
Commercial Light.....	33,390 02	32,165 55	1,897 62	3,055 99	7,245 39	7,245 01
Power.....	168,517 53	144,741 85	2,049 08	4,384 69	12,077 45	9,773 61
Municipal Power.....		33,787 47		539 64		1,625 05
Street Light.....	16,662 99	14,349 00	1,749 66	1,888 02	4,670 00	4,068 80
Rural.....						
Miscellaneous.....	415 21	3,159 53			2,905 13	2,928 21
Total.....	260,570 12	273,635 74	8,780 55	14,123 77	39,293 34	40,100 56
Expenses						
Power Purchased.....	91,382 98	108,230 49	7,007 59	8,812 29	18,099 77	19,973 83
Sub-Stn. Operation.....	8,147 96	8,430 02			450 54	
“ “ Maint’ce.....	294 55	1,911 78				
Dist. System, Operation and Maintenance.....	10,764 92	8,345 35	497 10	661 10	1,219 75	711 22
Line Transformer M’t’c’e.....	508 76	742 72			18 27	
Meter Maintenance.....	402 62	4,299 04				49 99
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	1,565 09	1,598 86	330 27	321 34	563 66	1,000 31
Promotion of Business.....		1,071 62				
Billing and Collecting.....	3,149 34	3,390 63				
Gen. Office, Sal. and Exp.....	13,301 86	12,398 71	697 18	800 48	2,872 49	3,249 80
Undistributed Expenses.....	944 93	3,322 66			692 52	776 57
Int. and Deb. Payments.....	43,821 64	44,358 21	3,059 16	2,968 48	3,476 93	3,476 93
Miscellaneous Expenses.....						
Total Expenses.....	174,284 05	198,100 09	11,591 30	13,563 69	27,393 93	29,238 65
Surplus.....	86,286 07	75,535 65		560 08	11,899 41	10,861 91
Loss.....			2,810 75			
Depreciation Charge.....	15,000 00	11,492 00	1,400 00	1,299 00	3,768 00	4,233 50
Surp. Less Depr. Chg.....	71,286 07	64,043 65	4,210 75	738 92	8,131 41	6,628 41

Italics denote losses.
xf Hydro, Water, Telephone and Railway under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Beeton xa 492		Bradford 866		Coldwater 584		Collingwood 7,262		Cookstown z xa	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
904 40	1,284 55	759 12	1,727 98	1,134 84	1,415 14	11,510 41	13,999 34	806 46	1,388 97
738 36	906 28	869 68	1,350 90	680 02	1,054 87	6,080 21	7,121 77	263 18	468 63
3,336 77	3,740 12	63 33	428 61	1,064 00	1,548 42	32,037 22	24,610 88	1,335 27	1,669 48
992 00	1,240 00	1,755 37	1,462 00	528 00	580 00	3,952 50	1,481 36	952 00	1,050 00
		18 69	2 00			156 72	3,974 17		
5,971 53	7,170 95	3,466 19	4,971 49	3,406 86	4,598 43	53,737 06	51,326 04	3,356 91	4,577 08
7,154 20	7,055 91	5,346 91	5,441 62	2,593 10	2,266 49	49,403 54	47,258 00	3,039 48	3,204 59
						400 85	3 03		
19 00		192 91	124 68	241 17	460 02	1,008 90	1,204 86	67 06	79 41
						3 27	17 43		
						1,499 55	6 47		
245 53	62 24	104 62	264 79	121 76	74 22	77 58	404 18	23 60	98 62
						1,844 55	2,105 50		
198 72	351 60	298 68	411 34	133 31	219 47	3,145 90	2,791 35	162 74	209 92
						212 68	190 07		
1,087 21	1,166 71	1,219 92	1,546 43	554 70	632 47	1,319 68	1,665 66	906 40	1,020 10
8,704 66	8,636 46	7,163 04	7,788 86	3,644 04	3,652 67	58,916 50	55,646 55	4,199 28	4,612 64
					945 76				
2,733 13	1,465 51	3,696 85	2,817 37	237 18	.....	5,179 44	4,320 51	842 37	35 56
535 00	577 00	605 00	724 00	451 00	497 00	3,578 00	3,750 00	456 00	486 00
3,268 13	2,042 51	4,301 85	3,541 37	688 18	448 76	8,757 44	8,070 51	1,298 37	521 56

Italics denote losses.

xa Operated by Municipal Council.

“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

SEVERN
SYSTEM—Continued

Municipality	Creemore xa 615		Elmvale z		Midland xb 7,339		Penetan guishene xb 3,664
Population	1919	1920	1919	1920	1919	1920	1919
Earnings							
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,229 29	1,448 31	1,027 05	1,313 94	11,542 33	16,362 07	3,074 74
Commercial Light.....	1,302 94	1,413 24	1,030 63	1,120 45	5,303 02	7,435 12	2,874 63
Power.....	1,392 15	1,516 26	3,860 83	3,722 19	22,070 30	18,060 43	15,438 43
Municipal Power.....						1,500 00	
Street Light.....	880 58	880 08	624 00	683 50	3,535 00	4,401 00	2,131 00
Rural.....							
Miscellaneous.....					489 09	2,870 76	86 23
Total.....	4,804 96	5,257 89	6,542 51	6,840 08	42,939 74	50,629 38	23,605 03
Expenses							
Power Purchased.....	2,937 46	3,185 30	4,279 05	4,379 26	36,351 45	31,831 55	21,226 79
Sub-Stn. Operation.....					1,279 18	1,184 21	947 02
“ “ Maint’ce.....						131 43	
Dist. System, Operation and Maintenance.....	254 06	292 69	453 76	504 21	2,085 13	1,065 30	385 17
Line Transformer M’t’c’e.....					114 57	118 95	90 02
Meter Maintenance.....					111 46	214 97	
Consumers’ Premises—Exp.....							
Street Light Sys., Operation and Maintenance.....	45 22	91 69	73 44	66 01	1,368 17	321 73	239 24
Promotion of Business.....							
Billing and Collecting.....					248 50	581 02	248 30
Ger. Office, Sal. and Exp.....	299 15	120 26	382 00	388 12	3,102 11	3,778 89	1,614 39
Undistributed Expenses.....					254 08	312 90	386 33
Int. and Deb. Payments.....	465 88	474 24	459 99	445 94	5,610 98	4,549 12	2,067 70
Miscellaneous Expenses.....							
Total Expenses.....	4,001 77	4,164 18	5,648 24	5,783 54	50,525 63	44,090 07	27,204 96
Surplus.....	803 19	1,093 71	894 27	1,056 54		6,539 31	
Loss.....					7,585 89		3,599 93
Depreciation Charge.....	320 00	358 00	490 00	523 00	4,934 00	5,826 25	2,490 00
Surp. Less Depr. Chg.....	483 19	735 71	404 27	533 54	12,519 89	713 06	6,089 93

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Less than 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Penetan guishene	Port McNicoll		Stayner		Thornton		Tottenham	
	xa				xa		xa	
	z		870		z		475	
1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
4,971 37	1,201 52	1,514 24	1,368 49	1,896 77	390 38	564 08	1,323 68	1,528 86
3,340 35	528 68	566 00	1,334 50	1,683 99	158 36	198 24	984 93	1,011 40
20,541 30	51 13	87 40	3,382 97	3,826 07				
1,623 37								
2,390 50	376 00	456 00	827 50	1,008 00	387 30	448 54	1,200 50	1,029 00
96 58								
32,963 47	2,157 33	2,623 64	6,913 46	8,414 82	936 04	1,210 86	3,509 11	3,569 26
23,367 70	1,530 48	1,826 70	4,819 45	4,047 91	1,249 75	1,232 81	3,905 17	3,590 00
1,063 00								
228 49	88 04	156 72	447 00	394 33	45 49	3 06	319 47	248 18
345 46								
65 54								
73 00	57 46	45 63	30 63	85 92	9 00	22 05	29 45	49 52
255 85								
2,051 03	187 05	297 33	380 11	316 10	71 02	79 30	146 84	139 20
2,408 44	494 27	559 91	1,206 31	1,249 52	574 84	472 51	1,142 32	1,196 12
29,858 51	2,357 30	2,886 29	6,883 50	6,093 78	1,950 10	1,809 73	5,543 25	5,223 02
3,104 96			29 96	2,321 04				
	199 97	262 65			1,014 06	598 87	2,034 14	1,653 76
2,764 00	240 00	255 00	567 00	641 00	279 00	299 00	386 00	418 00
340 96	439 97	517 65	537 04	1,680 04	1,293 06	897 87	2,420 14	2,071 76

Italics denote losses.
xa Operated by Municipal Council
“z” Less than 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

SEVERN
SYSTEM—Continued

Municipality Population	Victoria Harbor xa 1,496		Waubauskene z		TOTALS	
	1919	1920	1919	1920	1919	1920
Earnings					17	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	931 86	1,222 63	735 40	1,050 26	53,419 53	70,403 82
Commercial Light.....	1,299 03	1,470 72	266 34	478 46	32,857 52	39,921 42
Power.....			41 10	70 49	98,200 03	93,979 94
Municipal Power.....						6,769 42
Street Light.....	540 00	610 00	360 00	360 00	25,461 41	26,529 61
Rural.....						
Miscellaneous.....					3,655 86	6,036 07
Total.....	2,770 89	3,303 35	1,402 84	1,959 21	213,594 35	243,640 28
Expenses						
Power Purchased.....	1,825 83	2,138 45	959 95	963 72	171,729 97	170,576 13
Sub-Stn. Operation.....					2,676 74	2,250 24
“““ Maint’ce.....					400 85	131 43
Dist. System, Operation and Maintenance.....	101 79	310 12	54 95	74 53	7,480 75	6,518 92
Line Transformer M’t’c’e.....					226 13	481 84
Meter Maintenance.....					1,611 01	336 97
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	32 75	24 80	52 62		3,405 00	3,006 05
Promotion of Business.....						
Billing and Collecting.....					2,341 35	2,942 37
Gen. Office, Sal. and Exp.....	246 56	458 87	308 50	269 88	14,246 75	15,932 94
Undistributed Expenses.....					1,545 61	1,279 54
Int. and Deb. Payments.....	516 04	536 12	295 93	310 61	24,458 26	24,679 31
Miscellaneous Expenses.....						
Total Expenses.....	2,722 97	3,468 36	1,671 95	1,618 74	230,122 42	228,135 74
Surplus.....	47 92			340 47		15,504 54
Loss.....		165 01	269 11		16,528 07	
Depreciation Charge.....	320 00	342 00	176 00	,194 00	20,995 00	23,186 75
Surp. Less Depr. Chg.....	272 08	507 01	445 11	146 47	37,523 07	7,682 21

Italics denote losses.
xa Operated by Municipal Council.
“z” Less than 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

ST. LAWRENCE
SYSTEM

Brockville		Chesterville		Prescott		Williamsburg	
xd	9,326	xa	925	xb	2,660	xa	z
1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
18,510 68	20,943 36	1,815 29	2,618 21	5,354 77	5,952 58	785 76	759 05
22,816 26	20,382 61	2,501 13	3,085 60	3,556 77	4,043 40	312 45	253 05
37,013 69	32,694 72	3,984 91	6,955 75	4,946 97	3,667 19	334 03	317 42
	5,878 00				1,539 72		
9,000 00	9,000 00	806 00	1,116 00	2,500 00	4,137 00	208 00	221 00
		303 50	846 33	146 81	83 67		
87,340 63	88,898 69	9,410 83	14,621 29	16,505 32	19,423 56	1,640 24	1,550 52
37,614 64	49,713 84	8,284 98	11,569 91	7,587 07	10,779 58	1,076 19	1,020 79
18,722 23	7,922 16			839 87	392 89		
4,676 18	1,378 04			78 97			
2,355 54	4,967 09	645 03	936 49	1,398 59	1,157 67	116 11	163 47
280 35	32 71						
884 27	1,199 05			7 33			
1,102 04	1,768 63	41 75	94 81	631 18	635 07	13 22	7 25
1,755 70	1,376 30						
775 95	819 88			16 68	72 52		
3,430 08	3,686 76	177 64	135 43	2,124 85	2,264 41	28 23	26 37
2,627 11	2,866 21			303 02	591 37		
16,879 94	17,622 28	896 80	1,032 20	2,076 77	2,254 35	267 15	277 16
91,104 03	93,352 95	10,046 20	13,768 84	15,064 33	18,147 86	1,500 90	1,495 04
			853 05	1,440 99	1,275 70	139 34	55 48
3,763 40	4,454 26	635 37					
	3,675 00	444 00	490 00	2,125 00	2,302 00	111 00	118 00
3,763 40	8,129 26	1,079 37	363 05	684 01	1,026 30	28 34	62 52

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
xd Hydro, Gas and Water under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

St. LAWRENCE SYSTEM					WASDELL'S SYSTEM	
Municipality	Winchester		TOTALS		Beaverton	
Population	xa	1,042			932	
	1919	1920	1919	1920	1919	1920
Earnings						
Domestic Light.....	\$ 3,086 06	\$ 3,808 56	\$ 29,552 56	\$ 34,081 76	\$ 2,818 75	\$ 3,472 74
Commercial Light.....	1,690 89	2,242 15	30,877 50	30,006 81	1,318 27	1,723 15
Power.....	444 94	569 08	46,724 54	44,204 16	1,608 86	3,332 06
Municipal Power.....				7,417 72		
Street Light.....	1,500 00	1,590 42	14,014 00	16,064 42	994 21	1,079 45
Rural.....						874 95
Miscellaneous.....	455 05	553 34	905 36	1,483 34	504 44	631 59
Total.....	7,176 94	8,763 55	122,073 96	133,258 21	7,244 53	11,113 94
Expenses						
Power Purchased.....	4,100 68	6,470 61	58,663 56	79,554 73	3,963 43	6,161 84
Sub-Stn. Operation.....			19,562 10	8,315 05		
“ “ Maint'ce.....			4,755 15	1,378 04		
Dist. System, Operation and Maintenance.....	741 22	1,075 54	5,256 49	8,300 26	956 12	1,143 95
Line Transformer M't'c'e.....			280 35	32 71		
Meter Maintenance.....			891 60	1,199 05		
Consumers' Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	174 70	117 53	1,962 89	2,623 29	127 55	64 88
Promotion of Business.....			1,755 70	1,376 30		
Billing and Collecting.....			792 63	892 40		
Gen. Office, Sal. and Exp.....	587 04	611 52	6,347 84	6,724 49	146 41	133 18
Undistributed Expenses.....			2,930 13	3,457 58		
Int. and Deb. Payments.....	960 88	959 77	21,081 54	22,145 76	1,675 50	1,532 92
Miscellaneous Expenses.....						
Total Expenses.....	6,564 52	9,234 97	124,279 98	135,999 66	6,869 01	9,036 77
Surplus.....	612 42				375 52	2,077 17
Loss.....		471 42	2,206 02	2,741 45		
Depreciation Charge.....	510 00	536 00	3,190 00	7,121 00	450 00	538 00
Surp. Less Depr. Chg.....	102 42	1,007 42	5,396 02	9,862 45	74 48	1,539 17

Italics denote losses.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Brechtin		Cannington		Kirk-	Sunderland		Woodville	
xa	z	818		field	xa	z	xa	z
1919	1920	1919	1920	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
422 33	596 76	2,656 21	3,713 43	78 91	1,123 51	1,580 01	847 09	1,423 96
559 35	707 93	1,437 51	2,042 35	320 95	905 32	1,060 24	637 49	1,122 12
2,157 29	1,646 15	786 09	1,132 55	.....	1,001 01	790 48	1,218 70	1,296 75
117 00	149 25	857 96	1,011 99	278 40	351 00	380 25	427 80	556 25
171 38	150 00	62 89	115 55	.....	635 42	1,299 20	.....	633 03
3,427 35	3,250 09	5,800 66	8,015 87	678 26	4,016 26	5,110 18	3,131 08	5,032 11
3,272 00	3,309 97	3,643 20	5,203 62	413 70	3,272 32	4,053 83	2,767 82	3,885 59
350 37	397 57	679 81	884 56	104 65	386 01	579 70	406 63	435 69
16 42	19 67	57 02	75 75	16 86	27 30	106 41	69 62	69 61
60 84	20 07	140 06	166 31	14 70	98 38	68 02	27 11	16 02
452 89	396 11	1,250 44	1,320 63	22 69	88 10	1,201 52	708 76	668 69
4,152 52	4,143 39	5,770 53	7,650 87	572 60	1,145 56	6,009 48	3,979 94	5,075 60
		30 13	365 00	105 66				
725 17	893 30				1,001 41	899 30	848 86	43 49
112 00	138 00	514 00	542 00	.....	215 00	237 00	155 00	170 00
837 17	1,031 30	483 87	177 00	105 66	1,216 41	1,136 30	1,003 86	213 49

Italics denote losses.

xa Operated by Municipal Council.

“z” Less than 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

WASDELL'S SYSTEM			EUGENIA SYSTEM			
Municipality	TOTALS		Arthur 1,027		Chatsworth xa z	
Population	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	7,867 89	10,865 81	1,393 50	1,949 56	601 96	724 34
Commercial Light.....	4,857 94	6,976 74	1,499 36	1,898 65	288 85	579 22
Power.....	6,771 95	8,197 99	5,103 85	4,948 55	622 58	298 26
Municipal Power.....						
Street Light.....	2,747 97	3,455 59	951 96	1,087 98	375 00	408 32
Rural.....	635 42	2,807 18				
Miscellaneous.....	738 71	897 14				
Total.....	23,619 88	33,200 45	8,948 67	9,884 74	1,888 39	2,010 14
Expenses						
Power Purchased.....	16,918 77	23,028 55	9,106 70	11,349 83	1,111 56	1,650 22
Sub-Stn. Operation.....						
“ “ Maint’ce.....						
Dist. System, Operation and Maintenance.....	2,778 94	3,546 12	122 18	477 09	19 53	61 82
Line Transformer M’t’c’e.....						
Meter Maintenance.....						
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	297 91	353 18	123 86	175 85	32 28	72 95
Promotion of Business.....						
Billing and Collecting.....						
Gen. Office, Sal. and Exp.....	472 80	418 30	281 86	398 91	136 79	184 24
Undistributed Expenses.....	88 10					
Int. and Deb. Payments.....	5,233 15	5,142 56	1,517 55	1,886 75	450 09	541 21
Miscellaneous Expenses.....						
Total Expenses.....	25,789 67	32,488 71	11,152 15	14,288 43	1,750 25	2,510 44
Surplus.....		711 74			138 14	
Loss.....	2,169 79		2,203 48	4,403 69		500 30
Depreciation Charge.....	1,446 00	1,625 00	824 00	927 00	219 00	221 00
Surp. Less Depr. Chg.....	3,615 79	913 26	3,027 48	5,330 69	80 86	721 30

Italics denote losses.
xa Operated by Municipal Council.
“z” Less than 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Chesley xb 1,703		Dundalk xa 700		Durham 1,500		Elmwood xa z		Flesherton 378	
1919	1920	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,975 29	4,000 52	1,024 86	1,328 45	2,168 82	3,095 24	467 59	592 57	725 42	1,152 24
2,679 48	2,948 77	951 61	1,284 67	1,486 18	2,182 30	196 61	351 78	437 61	763 00
4,642 70	6,905 15	2,306 60	2,208 80	713 92	2,430 41	1,429 31	1,514 17	970 27	701 76
	458 94								
1,274 04	1,372 02	744 00	800 06	1,342 00	1,224 50	417 50	569 25	504 00	594 00
206 47	143 09						1 80		
11,777 98	15,828 49	5,027 07	5,621 98	5,710 92	8,932 45	2,511 01	3,029 57	2,637 30	3,211 00
6,707 01	12,679 37	2,850 92	4,373 18	2,478 24	4,958 47	1,988 17	2,882 66	1,764 58	2,550 79
428 02	686 56	153 43	376 19	601 90	168 68	112 88	40 77	31 79	30 53
95 75	66 86	81 60	91 54	162 72	114 52		29 84		58 31
621 11	551 45	230 19	221 44	673 96	768 62	77 45	123 14	224 63	143 20
			128 21	7 47					8 02
2,534 55	2,601 85	875 45	468 07	1,657 63	1,728 68	650 77	648 90	546 15	478 28
10,386 44	16,586 09	4,191 59	5,658 63	3,581 98	7,738 97	2,829 27	3,725 31	2,567 15	3,269 13
1,391 54		835 48		128 94	1,193 48			70 15	
	757 60		36 65			318 20	695 74		58 13
992 00	1,111 00	350 00	386 00	725 00	870 00	243 00	259 00	290 00	306 00
399 54	1,868 60	485 48	422 65	596 06	323 48	561 26	954 74	219 85	364 13

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.
“z” Less than 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

EUGENIA
SYSTEM—Continued

Municipality Population	Grand Valley xa 558		Hanover xb 3,225		Holstein xa z		Markdale xa 925
—	1919	1920	1919	1920	1919	1920	1919
Earnings							
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	1,110 28	1,725 49	4,708 40	6,599 51	308 37	459 38	1,611 23
Commercial Light.....	987 20	1,484 90	3,023 83	3,852 40	228 57	405 80	937 23
Power.....	1,582 91	1,631 54	14,737 24	16,954 80	752 37	109 47	1,140 94
Municipal Power.....							
Street Light.....	721 00	832 00	1,919 70	2,010 50	186 00	231 50	685 51
Rural.....							
Miscellaneous.....	2 58	7 38	596 18	107 61			213 89
Total.....	4,403 97	5,681 31	24,985 35	29,524 82	1,475 31	1,206 15	4,588 80
Expenses							
Power Purchased.....	2,968 62	4,710 33	13,296 36	26,087 94	1,672 75	1,484 58	1,924 35
Sub-Stn Operation.....							
“ “ Maint’ce.....							
Dist. System, Operation and Maintenance.....	45 69	48 65	738 46	1,944 51	56 40	27 78	40 45
Line Transformer M’t’c’e.....							
Meter Maintenance.....							
Consu Qers’ Premises—Exp.....							
Street Light Sys., Operation and Maintenance.....	55 04	60 50	122 66	289 62	17 98	11 64	171 85
Promotion of Business.....							
Billing and Collecting.....							
Gen. Office, Sal. and Exp.....	258 62	282 15	1,334 67	1,573 76	74 92	108 33	404 33
Undistributed Expenses.....							13 52
Int. and Deb. Payments.....	978 10	988 50	5,260 34	5,319 04	364 70	382 99	1,014 70
Miscellaneous Expenses.....							
Total Expenses.....	4,306 07	6,090 13	20,752 49	35,214 87	2,186 75	2,015 32	3,569 20
Surplus.....	97 90		4,232 86				1,019 60
Loss.....		408 82		5,690 05	711 44	809 17	
Depreciation Charge.....	433 00	473 00	2,018 00	2,536 00	131 00	122 00	482 00
Surp. Less Depr. Chg.....	335 10	881 82	2,214 86	8,226 05	842 44	931 17	537 60

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission
“z” Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

Mark- dale	Mount Forest 1,716		Neustadt xa 412		Orangeville 2,173		Owen Sound xb 11,768	
	1919	1920	1919	1920	1919	1920	1919	1920
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
2,054 17	2,596 70	2,959 09	419 91	813 48	2,390 39	2,891 19	17,879 28	21,798 34
1,321 06	2,809 05	3,625 36	475 59	526 21	2,352 35	2,852 54	13,931 89	15,160 58
1,513 24	3,561 63	2,772 21	389 93	2,656 17	3,797 70	3,813 67	23,289 00	24,645 87
		1,410 21				314 00		
739 37	1,710 00	1,953 00	656 25	819 00	1,857 99	2,849 15	11,555 00	11,018 09
193 27								
481 26	985 21				247 10	233 87	1,792 63	2,076 01
6,302 37	11,662 59	12,719 87	1,941 68	4,814 86	10,645 53	12,954 42	68,447 80	74,698 89
2,973 66	6,846 74	10,652 13	1,816 74	5,030 57	6,695 64	9,745 84	24,923 93	47,256 74
							2,935 07	
								3,152 31
434 47	306 38	500 34	72 12	288 08	1,296 05	1,473 66	8,019 63	1,827 83
							152 98	
							3,948 96	539 59
91 80	87 65	434 48	22 65	59 37	75 11	116 14	1,957 88	1,952 74
							1,872 13	1,915 58
459 73	514 03	724 22	108 86	116 70	365 16	430 57	4,611 74	6,181 94
		262 15					546 44	471 96
953 99	2,450 32	2,611 45	1,009 75	1,336 71	3,006 10	3,088 37	9,593 81	8,614 29
4,913 65	10,205 12	15,184 77	3,030 12	6,831 43	11,438 06	14,854 58	58,562 57	71,912 98
1,388 72	1,457 47						9,885 23	2,785 91
		2,464 90	1,088 44	2,016 57	792 53	1,900 16		
573 00	1,028 00	1,109 00	452 00	502 00	1,235 00	1,313 00	5,700 90	6,006 25
815 72	429 47	3,573 90	1,540 44	2,518 57	2,027 53	3,213 16	4,184 33	3,220 34

Italics denote losses.
xa Operated by Municipal Council.
xb Hydro and Water Departments under one Commission.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

EUGENIA
SYSTEM—Continued

Municipality Population	Shelburne		Tara		TOTALS	
	970		xa	z		
	1919	1920	1919	1920	1919	1920
Earnings					17	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	2,046 30	2,616 47	601 28	1,093 36	43,029 58	55,853 40
Commercial Light.....	1,645 38	2,084 51	694 94	1,047 54	34,625 73	42,369 29
Power.....	2,606 52	3,752 54	519 73	950 40	68,167 20	77,807 01
Municipal Power.....		333 78				2,516 93
Street Light.....	1,092 00	1,182 96	1,024 00	1,272 00	27,015 95	28,963 70
Rural.....			102 46	113 07	102 46	306 34
Miscellaneous.....					4,044 06	3,051 02
Total.....	7,390 20	9,970 26	2,942 41	4,476 37	176,984 98	210,867 69
Expenses						
Power Purchased.....	4,944 31	8,674 95	3,323 93	5,002 58	94,420 55	162,063 79
Sub-Stn Operation.....					2,935 07	
“ “ Maint’ce.....						3,152 31
Dist. System, Operation and and Maintenance.....	191 89	471 34	110 02	154 78	12,346 88	9,013 08
Line Transformer M’t’c’e.....					152 98	
Meter Maintenance.....					3,948 96	539 59
Consumers’ Premises—Exp.....						
Street Light Sys., Operation and Maintenance.....	62 72	60 00	53 36	84 81	3,123 11	3,770 97
Promotion of Business.....						
Billing and Collecting.....					1,872 13	1,915 58
Gen. Office, Sal. and Exp.....	598 67	660 08	215 26	267 42	10,732 25	13,195 90
Undistributed Expenses.....					567 43	870 34
Int. and Deb. Payments.....	1,486 96	1,689 57	1,022 19	1,186 83	34,419 16	34,525 48
Miscellaneous Expenses.....						
Total Expenses.....	7,284 55	11,555 94	4,724 76	6,696 37	164,518 52	229,047 04
Surplus.....	105 65				12,466 46	
Loss.....		1,585 68	1,782 35	2,220 00		18,179 35
Depreciation Charge.....	688 00	822 00	490 00	545 00	16,300 90	18,081 25
Surp. Less Depr. Chg.....	582 35	2,407 68	2,272 35	2,765 00	3,834 44	36,260 60

Italics denote losses.
xa Operated by Municipal Council.
“z” Under 500 population.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

OTTAWA SYSTEM		MUSKOKA SYSTEM					
Ottawa 107,732		Gravenhurst xb 1,502		Huntsville xb 2,113		TOTALS	
1919	1920	1919	1920	1919	1920	1919	1920
1						2	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
97,402 16	109,844 13	2,326 25	2,832 40	4,899 77	6,953 49	7,226 02	9,785 89
52,187 97	62,833 70	4,901 04	4,762 31	1,862 04	3,233 63	6,763 08	7,995 94
63,255 59	34,881 92	4,991 09	5,943 74	14,605 94	14,228 65	19,597 03	20,172 39
	26,799 34		633 00		1,083 33		1,716 33
59,567 13	60,396 13	1,247 62	1,199 18	1,860 00	1,887 00	3,107 62	3,086 18
3,540 22	10,555 57	389 36	504 44		84 57	389 36	589 01
275,953 07	305,310 79	13,855 36	15,875 07	23,227 75	27,470 67	37,083 11	43,345 74
88,562 56	96,791 65	7,320 29	7,022 07	21,031 20	19,586 93	28,351 49	26,609 00
5,662 70	7,956 62						
259 88	200 33						
16,343 82	19,477 18	2,853 64	2,497 83	589 10	1,025 60	3,442 74	3,523 43
318 51	888 00						
3,415 32	3,469 78						
23,485 50	25,060 34	293 13	372 65	108 86	98 68	401 99	471 33
8,594 29	7,250 02						
20,730 71	22,598 50						
14,404 24	15,862 29	1,779 98	1,715 74	1,833 07	2,447 57	3,613 05	4,163 31
6,910 33	8,618 89			97 23		97 23	
40,392 03	41,927 74	3,892 85	4,089 04	2,101 89	2,496 92	5,994 74	6,585 96
229,079 89	250,101 34	16,139 89	15,697 33	25,761 35	25,655 70	41,901 24	41,353 03
46,873 18	55,209 45		177 74		1,814 97		1,992 71
		2,284 53		2,533 60		4,818 13	
39,130 00	42,800 00	2,068 00	2,170 00	989 00	884 00	3,057 00	3,054 00
7,743 18	12,409 45	4,352 53	1,992 26	3,522 60	930 97	7,875 13	1,061 29

Italics denote losses.
xb Hydro and Water Departments under one Commission.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

RIDEAU
SYSTEM

Municipality Population	Carleton Place xb 3,884		Perth xb 3,545		Smith's Falls 6,665	
	1919	1920	1919	1920	1919	1920
Earnings						
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light	3,525 67	8,241 32	8,477 47	10,216 95	12,798 23	19,399 20
Commercial Light	2,978 02	6,835 20	6,748 11	7,025 19	8,267 12	11,655 03
Power	8,318 98	16,446 76	8,550 93	13,538 26	12,127 54	18,676 17
Municipal Power		1,340 30		2,110 01		3,716 58
Street Light	756 00	1,306 50	1,304 43	1,064 30	4,250 00	4,612 22
Rural						
Miscellaneous	68 32		2,234 16	3,374 68	921 58	702 14
Total	15,646 99	34,170 08	27,315 10	37,329 39	38,364 47	58,761 34
Expenses						
Power Purchased	6,796 97	23,033 09	10,489 34	20,083 77	10,091 32	23,848 30
Sub-Stn. Operation	33 38	24 02	3,535 50	1,170 00	5,537 19	10,338 48
“ “ Maint'ce.			1,667 04	752 37	464 22	1,107 58
Dist. System, Operation and Maintenance	1,000 12	2,142 17	134 09	389 51	717 70	2,613 15
Line Transformer M't'c'e.	47 83	58 95	14 03	39 52		
Meter Maintenance		777 20	18 51	30 68	262 11	389 47
Consumers' Premises—Exp.						
Street Light Sys., Operation and Maintenance	261 97	750 55	1,222 38	385 69	820 81	919 32
Promotion of Business						
Billing and Collecting	211 53	520 54	327 33	748 85	3,391 92	2,938 22
Gen. Office, Sal. and Exp.	1,712 91	2,987 28	1,265 55	1,023 40	4,083 54	4,821 23
Undistributed Expenses		50 74	428 53	462 55	1,063 50	1,186 33
Int. and Deb. Payments	424 92	3,908 96	7,058 31	7,885 69	14,680 09	14,586 20
Miscellaneous Expenses						
Total Expenses	10,489 63	34,253 50	26,160 61	32,972 03	41,112 40	62,748 28
Surplus	5,157 36		1,154 49	4,357 36		
Loss		83 42			2,747 93	3,986 94
Depreciation Charge	1,735 00	1,891 00	2,284 00	2,493 00	4,848 00	5,615 00
Surp. Less Depr. Chg.	3,422 36	1,974 42	1,129 51	1,864 36	7,595 93	9,601 94

Italics denote losses.
xb Hydro and Water Departments under one Commission.

“C”—Continued

Municipalities for the years ending Dec. 31st, 1919 and 1920

TOTALS		TRENT SYSTEM					
		Bloomfield		Kingston		Omemee	
		500		xc 23,261		xa z	
1919	1920	1919	1920	1919	1920	1919	1920
3		i					
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
24,801 37	37,857 47	557 25	1,184 19	32,247 30	36,308 98	733 28	999 89
17,993 25	25,515 42	131 43	607 68	49,268 27	47,611 14	623 64	681 07
28,997 45	48,661 19	401 60	1,000 32	42,710 51	34,811 19	670 27	248 29
	7,166 89				5,952 04		
6,310 43	6,983 02	406 87	875 00	22,200 91	23,324 66	780 00	893 74
3,224 06	4,076 82		15 93	2,201 61	3,493 75		
81,326 56	130,260 81	1,497 15	3,683 12	148,628 60	151,501 76	2,807 19	2,822 99
27,377 63	66,965 16	1,080 58	2,365 19	44,061 50	48,401 18	1,007 73	1,241 10
9,106 07	11,532 50			10,302 39	11,776 80		
2,131 26	1,859 95			1,004 60	3,171 65		
1,851 91	5,144 83	10 05	11 00	5,254 26	5,175 75	160 77	165 01
61 86	98 47			598 39	1,918 89		
280 62	1,197 35			1,931 36	2,464 38		
2,305 16	2,055 56	6 85	10 52	7,440 27	9,883 67	37 74	35
3,930 78	4,207 61			2,961 94	3,644 74		
7,062 00	8,831 91	114 80	249 01	5,370 73	6,052 83	133 25	159 14
1,492 03	1,699 62			3,984 09	5,246 41		
22,163 32	26,380 85	481 51	707 58	22,348 65	22,207 55	1,002 68	1,092 18
77,762 64	129,973 81	1,693 79	3,343 30	105,258 18	119,943 85	2,342 17	2,667 78
3,563 92	287 00		339 82	43,370 42	31,557 91	465 02	165 21
		196 64					
8,867 00	9,999 00		367 00	10,963 00	11,958 00	420 00	455 00
5,303 08	9,712 00	196 64	27 18	32,407 42	19,599 91	45 02	289 79

Italics denote losses.
xa Operated by Municipal Council.
xc Hydro and Gas under one Commission.
“z” Under 500 population.

STATEMENT

Comparative Detailed Operating Reports of Electric Departments of Hydro

TRENT
SYSTEM—Continued

Municipality	Lake- field 1195 d	Peterboro xb 21,230		Picton 3,257	
Population					
	1920	1919	1920	1919	1920
Earnings					
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Domestic Light.....	571 45	46,282 34	51,291 38	14,064 01	9,915 08
Commercial Light.....	336 69	27,616 40	30,144 81	5,784 32	9,480 61
Power.....	1,328 30	38,930 06	51,072 38	1,239 91	5,148 99
Municipal Power.....					4,328 95
Street Light.....	607 00	14,554 87	14,888 98	6,190 94	3,936 00
Rural.....					
Miscellaneous.....	27 99	18 03	119 02	600 00	5,090 36
Total.....	2,871 43	127,401 70	147,516 57	27,879 18	37,900 01
Expenses					
Power Purchased.....	1,653 24	56,590 21	63,440 16	14,161 81	17,779 92
Sub-Stn. Operation.....		1,607 40	2,279 61		
“ “ Maint’ce.....		1,888 58	131 05		
Dist. System, Operation and Maintenance.....	400 00	11,114 26	18,058 03	69 61	1,527 28
Line Transformer M’t’c’e.....		1,174 22	1,481 66		
Meter Maintenance.....		3,737 93	4,167 99		
Consumers’ Premises—Exp Street Light Sys., Operation and Maintenance.....		4,535 50	3,587 22	39 00	223 25
Promotion of Business.....					
Billing and Collecting.....	116 84	6,105 51	6,103 70		
Gen. Office, Sal. and Exp.....		7,353 69	9,546 11	3,649 40	4,348 47
Undistributed Expenses.....		4,792 53	5,454 99		93 96
Int. and Deb. Payments.....		14,943 93	15,207 96	1,116 85	894 44
Miscellaneous Expenses.....					
Total Expenses.....	2,170 08	113,843 76	129,458 48	19,036 67	24,867 32
Surplus.....	701 35	13,557 94	18,058 09	8,842 51	13,032 69
Loss.....					
Depreciation Charge.....		8,293 00	9,177 00	460 00	653 00
Surp. Less Depr. Chg.....	701 35	5,264 94	8,881 09	8,382 51	12,379 69

“d” 4 months’ operation.

xb Hydro and Water Departments under one Commission.

“C”—Concluded

Municipalities for the years ending Dec. 31st, 1919 and 1920

				ALL SYSTEMS	
Wellington xa 802		TOTALS		GRAND TOTALS	
1919	1920	1919	1920	1919	1920
				181	
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
860 97	1,737 62	94,745 15	102,008 59	1,991,632 31	2,546,345 30
1,029 72	1,362 42	84,453 78	90,224 42	1,175,143 56	1,512,854 63
816 58	1,503 26	84,768 93	95,112 73	3,443,107 13	3,731,106 79
			10,280 99		553,361 52
338 58	868 00	44,472 17	45,393 38	988,900 95	1,005,535 11
					168,919 95
		8,798 71	8,747 07		189,778 63
3,045 85	5,471 30	317,238 74	351,767 18	7,827,054 60	9,707,900 93
1,881 73	3,220 09	121,143 62	138,100 88	3,284,490 68	4,216,667 87
		11,909 79	14,056 41	217,638 89	285,407 35
		2,893 18	3,302 70	81,853 63	102,050 81
167 63	230 05	19,012 36	25,567 12	286,310 76	344,551 57
		1,772 61	3,400 55	42,509 12	46,323 09
		5,669 29	6,632 37	78,726 64	123,701 18
				84,301 24	116,283 52
7 80	128 05	12,067 16	13,833 06	215,963 86	236,930 79
				74,789 22	78,294 85
		9,067 45	9,748 44	236,504 75	295,942 88
297 30	581 64	16,919 17	21,054 04	452,131 22	559,695 29
		8,776 62	10,795 36	186,686 29	250,317 29
314 55	1,148 64	43,915 99	41,258 35	1,285,571 51	1,431,807 16
				4,003 80	6,083 04
2,669 01	5,308 47	253,147 24	287,749 28	6,531,481 61	8,094,056 69
376 84	162 83	64,091 50	64,017 90	1,295,572 99	1,613,844 24
	555 00	20,610 12	23,165 00	814,219 37	902,028 75
376 84	392 17	43,481 38	40,852 90	481,353 62	711,815 49

Italics denote losses.
xa Operated by Municipal Council.

STATEMENT "D"

Cost of Power to Municipalities and Power Rates
to Consumers

STATEMENT "D"

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920, also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Year	Domestic Light						Commercial Light						Power		Average Horse Power	Average Cost per Horse Power	Total Number Consumers
		Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.				Net Cost prior to Hydro	Revenue	Number of Consumers
Acton—	1913	\$ 1,236 50	.....	82	.....	.....	.....	cents 10	\$ 1,567 48	.....	.....	62	.....	.....	.....	cents 10	\$ 318 77	3
	1914	1,463 72	21,192	146	15	.....	6.9	.....	1,496 18	.....	19,878	58	28	2 08	.....	.....	836 13	5
	1915	1,931 11	29,079	183	15	.....	6.6	.....	1,725 73	.....	24,336	53	36	2 59	7.1	.....	1,019 27	5
	1916	1,942 11	29,685	185	15	.....	6.5	.....	1,592 62	.....	35,227	60	52	2 35	4.5	.....	1,565 53	7
	1917	2,016 13	34,268	200	15	84	5.9	.....	1,600 56	.....	38,244	65	49	2 05	4.2	.....	4,116 69	9
	1918	2,154 00	41,593	219	16	85	5.2	.....	1,360 35	.....	32,897	61	43	1 80	4.1	.....	5,166 36	9
	1919	2,628 12	44,352	235	16	93	5.9	.....	1,613 56	.....	39,807	65	51	2 07	4.1	.....	5,329 46	10
1920	3,115 26	76,922	260	25	1 00	4.0	.....	1,672 82	.....	40,272	71	47	1 96	4.2	.....	5,230 46	10	
Ailsa Craig—	1916	579 57	6,270	51	.....	.....	9.2	None	213 46	.....	1,910	11	.....	.....	11.2	None	15 57	1
	1917	776 93	7,584	55	12	1 22	10.2	.....	255 84	.....	932	19	.....	.....	11.2	.....	1,591 95	4
	1918	820 95	9,176	58	13	1 22	8.9	.....	299 58	.....	3,432	24	13	1 19	8.7	.....	4,003 23	3
	1919	1,087 47	12,991	71	15	1 28	8.4	.....	496 94	.....	3,578	27	11	1 53	13.1	.....	3,786 31	1
	1920	1,292 33	14,654	78	16	1 38	8.8	.....	630 19	.....	6,627	30	18	1 75	9.5	.....	5,400 16	3
	1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alliston—	1918	1,160 23	.....	191	.....	.....	.....	12	713 95	.....	.....	81	.....	.....	.....	12	437 43	4
	1919	3,084 19	48,870	213	19	1 21	6.3	.....	1,897 62	.....	38,340	88	36	1 80	4.9	.....	2,049 08	8
	1920	4,255 43	62,464	243	21	1 46	6.8	.....	3,055 99	.....	51,527	88	49	2 89	6.0	.....	4,924 33	14
	1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arthur—	1917	854 24	9,307	60	13	1 19	9.1	10 + 25	922 38	.....	9,585	51	17	1 51	9.6	10 + 25	177 21	2
	1918	1,065 52	12,457	69	15	1 05	8.5	.....	940 54	.....	9,855	58	14	1 35	9.5	.....	3,285 56	4
	1919	1,393 50	16,840	84	17	1 38	8.3	.....	1,499 36	.....	16,210	64	21	1 95	9.2	.....	5,103 85	6
	1920	1,949 56	23,412	95	20	1 81	8.3	.....	1,898 65	.....	19,967	62	25	2 38	9.5	.....	4,948 55	6
Ancaster—	1920	6,201 70	116,305	363	27	1 42	5.3	None	646 09	.....	122 57	34	30	1 58	5.3	None	144 17	3
	1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Aylmer— 1918 1919 1920	2,569 66 5,391 99 6,553 82	..... 84,789 90,129	392 347 379	..... 20 1 30 20 1 44	..... 6.4 7.3	10+10	1,986 69 4,886 86 5,831 46	..... 77,168 77,650	112 118 109	..... 55 59	..... 3 38 4 46	..... 6.3 7.5	10+10	799 21 3,318 98 3,192 47	5 5 7	..... 104 146	..... 31 91 21 86	509 470 495
Ayr— 1915 1916 1917 1918 1919 1920	892 63 1,084 46 1,124 21 1,178 84 1,461 64 1,762 84	16,031 12,314 14,228 14,666 18,926 21,747	79 83 92 94 103 105	..... 13 1 12 14 1 08 13 1 05 15 1 19 17 1 40	5.5 8.8 7.9 8.0 7.7 8.1	12.5+25	773 08 804 00 857 27 806 01 1,118 50 1,421 75	9,477 12,960 12,441 10,134 14,474 18,329	35 48 49 47 43	..... 26 23 17 27 35	..... 1 61 1 50 1 37 1 99 2 75	8.1 6.2 6.9 7.9 7.8 7.8	12.5+25	348 78 393 39 966 44 1,033 02 1,015 08 2,251 84	1 2 2 2 3 6	..... ..... 32 41 41 70	..... ..... 30 20 25 19 24 76 32 17	115 133 142 145 153 154
Baden— 1913 1914 1915 1916 1917 1918 1919 1920	884 11 1,247 81 938 33 808 21 842 09 975 04 1,097 74 1,338 03	..... 6,920 12,729 8,824 10,066 16,543 15,917 18,212	75 82 72 84 58 60 68 73	..... 7 75 13 98 16 86 12 98 23 98 20 97 24 1 10	..... 10.0 7.4 5.5 8.4 4.3 4.7 4.7	None	* * * * * ..... ..... .....	..... 5,547 5,772 5,827 5,865 7,372 10,089	* * * * 23 23 26 28	..... 7 13 16 12 21 25 30	..... 75 98 86 98 98 97 110	..... 10.0 7.4 5.5 8.4 4.3 4.7 4.7	None	2,242 77 4,580 23 4,588 87 5,059 33 5,243 91 5,202 04 5,669 93 5,747 18	4 4 4 5 5 4 5 6	..... ..... ..... ..... 175 185 211 222	..... ..... ..... ..... 29 96 28 11 26 87 25 89	79 86 76 89 86 87 99 107
Barrie— 1913 1914 1915 1916 1917 1918 1919 1920	10,071 55 11,149 49 11,087 68 11,907 10 11,232 68 12,456 76 12,395 37 14,459 88	..... 152,095 147,307 204,420 242,297 278,882 345,723 534,517	563 651 843 896 942 956 1,079 1,279	..... 20 1 54 18 1 24 20 1 14 22 1 02 24 1 08 23 96 35 94	..... 7.3 7.1 5.8 4.6 4.4 4.2 2.7	9	9,252 70 9,464 64 9,572 91 10,635 67 8,750 24 7,365 45 7,245 39 7,245 01	..... 138,948 177,000 189,409 185,095 178,954 283,758 315,778	200 200 252 257 253 258 268 280	..... 58 65 63 61 58 88 94	3 85 3 93 3 50 3 50 2 86 2 40 2 25 2 16	..... 6.8 5.4 5.6 4.8 4.1 2.5 2.3	9	3,390 29 3,712 24 4,567 76 6,918 33 7,978 72 9,296 34 12,077 45 11,398 66	13 13 14 18 19 20 22 23	..... ..... ..... ..... 310 340 432 439	..... ..... ..... ..... 25 74 27 34 27 96 25 96	776 864 1,109 1,171 1,214 1,234 1,369 1,582
Beachville— 1913 1914 1915 1916 1917 1918 1919 1920	562 97 587 33 363 33 400 81 419 11 441 44 467 51 788 33	..... 4,422 5,356 5,891 6,317 6,448 8,721 12,838	45 45 37 42 44 47 53 69	..... ..... 11 74 13 84 12 79 11 79 14 74 15 95	..... 7.9 6.8 6.8 6.6 6.8 5.4 6.1	None	* * 296 37 263 62 286 14 267 81 421 38 375 22	..... 2,988 4,847 3,872 5,597 6,117 8,366 9,006	* * 12 12 12 13 13 19	..... ..... 34 27 39 42 54 39	..... ..... 2 05 1 83 1 99 1 86 2 70 1 65	..... 7.9 6.1 6.8 5.1 4.3 5.0 4.2	None	5,993 81 5,368 04 5,593 15 5,393 02 6,354 25 7,684 75 7,174 94 8,631 75	4 4 4 3 3 3 3 3	..... ..... ..... ..... 428 303 350	..... ..... ..... ..... 14 85 25 36 24 66	49 49 53 57 59 63 69 91
Bloomfield— 1920	1,184 19	12,063	76	13 130	9.8	None	607 68	6,283	15	35	3 38	9.7	None	1,000 32	4	36	27 79	95

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920, also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light							Commercial Light							Power		Average Cost per Horse Power	Total Number Consumers		
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue			Number of Consumers	
Beaverton—	1915	1,484 62	.....	131	.....	.....	.....	cents	\$ 1,149 67	.....	56	.....	.....	.....	.....	Flat	456 74	5	\$ c.	192
	1916	1,417 39	20,685	131	13	.....	6.9	Flat	1,065 23	.....	60	25	1 53	.....	.....	.....	383 45	6	.....	197
	1917	1,482 00	20,945	148	13	89	7.1	.....	1,041 84	18,162	51	28	1 58	.....	.....	.....	650 02	7	.....	206
	1918	2,109 23	27,754	127	17	1 28	7.6	.....	1,167 92	22,897	52	37	1 87	.....	.....	.....	1,235 93	8	.....	187
	1919	2,818 75	39,920	142	23	1 65	7.1	.....	1,318 27	36,495	53	57	2 07	.....	.....	.....	1,608 86	8	.....	203
	1920	3,472 74	59,573	151	33	1 91	5.8	.....	1,723 15	37,272	52	60	2 76	.....	.....	.....	3,332 06	11	.....	214
Beeton—	1918	268 41	.....	62	.....	.....	.....	11 + 15	144 29	.....	18	.....	.....	.....	.....	11 + 15	905 60	2	.....	82
	1919	904 40	10,114	66	13	1 14	8.9	.....	738 36	7,926	25	26	2 46	.....	.....	.....	3,336 77	1	.....	92
	1920	1,284 55	13,050	76	14	1 41	9.8	.....	906 28	10,137	28	30	2 70	.....	.....	.....	3,740 12	2	.....	106
Blenheim—	1917	2,256 70	30,314	212	12	89	7.4	10	2,113 67	28,786	84	29	2 09	.....	.....	.....	47 40	3	.....	299
	1918	2,281 49	29,136	216	11	88	7.8	.....	1,843 63	21,546	76	22	1 92	.....	.....	.....	1,578 42	10	.....	302
	1919	2,998 75	45,345	259	15	97	6.6	.....	2,541 02	46,942	85	46	2 49	.....	.....	.....	3,178 87	9	.....	353
	1920	3,519 19	70,262	308	19	95	5.0	.....	2,956 41	60,862	91	56	2 71	.....	.....	.....	3,237 99	11	.....	410
Bolton—	1915	624 86	6,563	59	.....	.....	9.5	10 + 25	553 80	7,298	42	.....	.....	.....	.....	10 + 25	313 74	3	.....	104
	1916	926 86	9,322	70	12	1 20	9.9	.....	882 26	13,081	36	28	1 88	.....	.....	.....	3,947 32	4	.....	110
	1917	1,191 92	12,829	78	13	1 27	9.3	.....	698 70	12,534	44	26	1 46	.....	.....	.....	2,856 39	5	.....	127
	1918	1,262 21	12,072	80	12	1 33	10.	.....	791 76	12,997	44	24	1 49	.....	.....	.....	3,882 39	5	.....	129
	1919	1,285 93	16,710	90	16	1 19	7.5	.....	874 67	14,154	42	28	1 73	.....	.....	.....	2,812 67	7	.....	139
	1920	1,450 23	19,690	97	17	1 24	7.4	.....	138 69	18,262	43	31	2 34	.....	.....	.....	4,060 05	9	.....	149

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920, also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power		Average Cost per Horse Power	Total Number of Consumers
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro			Revenue	Number of Consumers
Brookville—																
1916	12,897 12	144,913	965	.....	.....	9.0	9	21,994 02	253,153	312	.....	.....	8.7	9	15,828 62	31
1917	14,507 95	152,066	1,018	13	1 22	9.5		22,907 56	246,940	378	59	5 54	9.3		30,744 84	49
1918	15,731 23	162,902	1,146	12	1 21	9.6		23,465 06	250,375	353	57	5 35	9.3		49,647 73	47
1919	18,510 68	234,923	1,339	15	1 15	7.9		22,816 26	310,515	370	70	5 14	7.3		37,013 69	56
1920	20,943 36	324,733	1,396	20	1 25	6.4		20,382 61	368,790	344	89	4 94	5.6		38,572 72	59
Burford—																
1916	577 69	9,005	64	.....	.....	6.4	Flat	380 44	7,569	30	.....	.....	5.0	Flat	519 72	1
1917	834 73	11,519	79	13	.....	7.2		837 51	13,262	34	34	2 18	6.3		549 31	1
1918	1,089 73	15,489	81	16	1 13	7.0		922 16	13,700	27	38	2 56	6.7		434 05	1
1919	1,330 31	18,769	100	17	1 10	7.0		1,064 23	17,680	32	46	2 77	6.0		543 25	1
1920	2,023 41	.....	115	.....	1 56	.....		1,194 81	.....	34	.....	3 02	.....		279 34	1
Burgessville—																
1917	359 41	5,299	29	.....	.....	.....	None	115 15	1,506	9	.....	.....	.....		815 36	1
1918	379 94	4,025	32	11	1 01	9.4		102 66	1,321	10	12	95	7.7	None	875 67	1
1919	423 05	5,623	37	13	95	7.5		127 43	1,375	10	11	1 06	9.3		643 88	1
1920	593 18	8,102	45	15	1 10	7.3		14,791	1,955	10	16	1 23	7.6		688, 75	1
Caledonia—																
1913	404 60	.....	17	.....	.....	.....	None	*	.....	16	.....	.....	.....	None	470 34	1
1914	880 54	.....	21	.....	.....	.....		*	.....	32	.....	.....	.....		188 54	1
1915	265 62	4,618	24	16	98	5.4		950 38	18,325	33	47	2 44	5.4		138 42	1
1916	263 39	4,800	27	16	86	5.5		777 38	20,000	37	47	1 85	4.		519 82	3
1917	283 63	5,500	33	13	79	5.2		786 20	22,800	38	50	1 72	3.4		777 85	4
1918	354 98	7,256	40	16	82	4.8		807 14	19,464	42	42	1 68	4.1		922 18	4
1919	453 53	9,106	44	17	86	5.0		907 76	24,929	45	46	1 68	3.7		733 31	8
1920	671 96	19,407	60	28	93	3.4		1,155 64	44,932	49	76	1 97	2.6		989 23	9

[illegible]

Collingwood—															715					
1913	7,013	66	83,406	477	.....	8.4	11 + 10	9,362	17	108,676	220	.....	8.4	11 + 10	896	72	18	.....	.....	807
1914	7,857	86	103,598	554	16	1 27	7.6	7,555	54	124,276	232	46	2 78	6.1	5,165	39	21	.....	.....	881
1915	7,094	27	118,336	622	17	1 00	6.0	5,688	26	116,583	233	42	2 04	4.9	9,527	70	26	.....	.....	989
1916	8,320	44	162,464	714	20	1 04	5.1	6,213	86	163,956	242	58	2 18	3.8	23,152	41	33	.....	.....	1,112
1917	8,734	98	243,070	835	26	94	3.6	5,398	59	189,485	236	66	1 99	2.8	38,989	24	41	1,558	25	04
1918	11,145	94	257,082	919	24	1 05	4.3	6,287	25	226,399	234	80	2 23	2.7	53,323	26	49	2,149	24	77
1919	11,510	41	431,071	1,007	37	95	2.7	6,080	21	272,538	235	97	2 17	2.2	32,037	22	50	1,498	21	39
1920	13,999	34	523,185	1,077	40	1 08	2.7	7,121	77	305,119	242	105	2 45	2.3	26,092	24	52	1,654	15	78
Creemore—															138					
1915	699	81	6,399	78	.....	10.9	Flat	937	84	7,653	59	.....	.....	12.2	939	20	1	.....	.....	132
1916	922	41	9,678	78	14	1 00	7.2	1,041	90	18,745	44	15	1 72	11.9	1,151	96	2	.....	.....	127
1917	973	25	9,257	69	11	1 11	10.5	1,124	74	11,105	55	19	1 91	10.1	1,210	57	3	54	22	42
1918	1,070	46	10,159	88	10	1 13	10.4	1,098	57	10,328	51	16	1 72	10.6	1,357	87	3	54	25	14
1919	1,229	29	10,812	93	10	1 11	11.1	1,302	94	12,642	53	20	2 05	10.4	1,392	15	5	62	22	45
1920	1,448	31	15,168	130	10	93	9.3	1,413	24	14,558	52	23	2 26	9.7	1,516	26	6	68	22	30
Chippawa—															63					
1920	2,078	72	39,243	116	40	2 14	5.3	269	76	.....	23	.....	1 40	.....	.....	.....	.....	.....	.....	.....
Dashwood—															47					
1918	432	06	3,742	31	8	92	11.5	311	16	2,780	15	12	1 38	11.0	2,386	71	1	46	51	88
1919	462	51	4,539	35	11	1 10	10.2	373	22	3,054	18	14	1 73	12.2	2,052	60	2	53	38	73
1920	57,884		6,017	39	13	1 26	9.6	408	21	3,870	21	15	1 62	10.1	1,524	60	2	52	29	32
Delaware—															33					
1915	146	16	.....	22	.....	.....	None	114	18	.....	10	.....	.....	.....	.....	.....	1	.....	.....	.....
1916	354	60	2,835	23	11	1 35	12.5	141	64	1,823	12	14	1 07	7.8	.....	.....	.....	.....	.....	.....
1917	260	94	2,596	24	9	91	10.1	203	25	1,947	12	14	1 21	10.5	.....	.....	.....	.....	.....	.....
1918	277	27	3,472	31	10	84	7.9	177	94	1,960	6	18	1 64	9.0	.....	.....	.....	.....	.....	.....
1919	457	11	3,799	32	10	1 19	11.0	156	00	1,781	11	16	1 18	11.0	.....	.....	.....	.....	.....	.....
1920	852	14	6,285	34	15	2 09	13.5	171	50	2,962	11	22	1 28	5.8	.....	.....	.....	.....	.....	.....
Dorchester—															81					
1915	579	23	6,840	61	.....	8.5	None	309	88	4,806	18	.....	.....	6.4	287	95	2	.....	.....	.....
1916	613	03	7,329	61	10	1 84	8.4	275	82	4,879	16	19	1 35	5.7	667	93	2	.....	.....	.....
1917	768	08	10,046	70	13	98	7.6	177	25	2,583	11	17	1 14	6.9	314	48	2	.....	.....	.....
1918	810	17	9,895	76	11	92	8.1	188	33	2,710	13	18	1 30	6.9	34	81	1	.....	.....	.....
1919	1,043	54	11,187	84	11	1 04	9.3	281	20	2,985	14	18	1 67	9.4	47	14	2	.....	.....	.....
1920	1,274	20	14,260	96	12	1 11	8.9	345	51	5,428	15	30	1 92	6.4	398	94	3	.....	.....	.....
Drayton—															125					
1918	942	09	.....	83	.....	.....	Flat	580	32	.....	40	.....	.....	.....	1,256	17	2	.....	.....	.....
1919	1,431	29	11,060	89	11	134	12.9	973	35	7,450	42	15	1 93	13.1	1,542	15	1	43	35	86
1920	1,582	55	20,312	110	15	120	7.8	1,250	48	15,960	30	44	3 47	7.8	954	57	2	28	34	09

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920, also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light							Commercial Light							Power				
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers
Year	\$ c.	Kw-hrs.		kw-hr	\$ c.	cents.	cents	\$ c.			kw-hr	\$ c.	cents	cents	\$ c.			\$ c.	
Dresden—																			
1915	1,093 68		185	12	87	7.5	Flat	1,223 25		109	24	1 54	6.5	Flat					294
1916	1,995 51	26,473	197	12	87	7.4		1,986 21		106	23	1 57	6.9						303
1917	2,158 62	28,977	206	12	92	7.3		1,983 96		105	24	1 77	7.2			1	5	20 58	312
1918	2,308 18	31,560	209	12	97	6.7		2,254 48		107	34	2 09	6.1			2	55	21 79	318
1919	2,711 78	40,529	236	14	97	6.4		2,730 58		109	41	2 31	5.6			7	156	36 85	352
1920	3,165 58	49,650	244	17	1 08			2,941 56		106						8	206	32 84	358
Drumbo—																			
1915	304 49		40				None	288 99		30				None		1			71
1916	340 75	4,481	35	10	77	7.5		277 43		22	15	1 12	7.6						57
1917	350 11	4,298	38	10	81	8.1		301 20		22	15	1 14	7.4						60
1918	392 90	4,592	44	9	79	8.5		299 10		22	14	1 13	7.6			1	2	21 57	67
1919	525 50	6,384	48	11	91	8.2		464 76		23	25	1 70	7.1			1	10	20 00	72
1920	722 83	7,484	53	12	1 13	9.6		674 50		24	30	2 34	7.8			1	6	18 30	78
Dublin—																			
1918	126 62		9				None	257 07		17				None		2			28
1919	186 54	24 00	13	15	1 20	7.8		352 06		18	22	1 63	7.6			2	29	28 49	33
1920	393 82	5,312	21	21	1 56	7.4		423 54		15	28	2 35	8.4			3	34	32 21	39
Dundalk—																			
1916	924 30		88				Flat	960 58		63						2			153
1917	926 52	12,065	80	12	92	7.7		872 71		76	15	1 05	6.9			4	27		160
1918	942 02	14,698	91	14	91	6.1		822 35		60	16	1 01	6.3			4	82	21 61	155
1919	1,024 86	16,892	99	14	86	6.1		951 61		71	20	1 12	5.6			4	94	24 54	174
1920	1,328 45	19,775	99	17	1 12	6.7		1,284 67		75	24	1 43	6.0			3	85	25 99	177

Dundas—	1913	3,045	85	.....	377	.....	19	99	5.8	10+25	4,193	27	.....	134	.....	69	2 44	3.5	10+25	3,070	40	27	.....	538
	1914	5,349	24	92,168	520	.....	19	90	4.8	.....	4,198	64	.....	153	.....	84	2 29	2.7	.....	4,305	96	30	.....	703
	1915	6,139	97	128,600	613	.....	19	89	4.8	.....	4,310	96	.....	160	.....	91	2 39	2.6	.....	5,930	54	37	.....	810
	1916	6,925	46	146,710	673	.....	19	89	4.8	.....	4,714	78	.....	168	.....	75	2 04	2.7	.....	10,915	58	35	.....	876
	1917	8,335	64	217,654	783	.....	25	95	3.8	.....	4,190	60	.....	175	.....	92	2 14	2.3	.....	10,284	87	38	.....	996
	1918	9,361	34	262,147	861	.....	26	95	4.4	.....	4,428	66	.....	170	.....	123	2 77	2.3	.....	9,077	00	42	.....	1,073
	1919	10,457	60	255,119	631	.....	34	1 40	4.1	.....	5,111	72	.....	145	.....	137	2 76	2.0	.....	13,861	02	38	.....	814
Dunnville—	1920	8,244	97	423,784	754	.....	47	91	1.9	.....	5,239	16	.....	158	.....	137	2 76	2.0	.....	21,725	24	42	.....	954
	1918	3,200	84	26,019	143	.....	.....	.....	.....	Flat	3,576	93	.....	108	.....	80	3 33	4.2	Flat	641	00	7	.....	258
	1919	2,540	80	62,366	171	.....	30	1 24	4.1	.....	5,352	52	.....	134	.....	93	3 61	3.9	.....	4,649	29	15	.....	320
	1920	3,227	66	69,303	205	.....	28	1 31	4.6	.....	6,115	30	.....	141	.....	.....	.....	.....	.....	5,832	55	16	.....	362
	1915	318	85	3,970	108	.....	.....	.....	8.0	.....	206	59	.....	43	.....	.....	.....	7.3	.....	.....	.....	1	.....	152
	1916	1,353	04	17,243	112	.....	13	1 03	7.8	.....	960	27	.....	52	.....	23	1 34	7.2	Flat	135	31	1	.....	165
	1917	1,381	08	17,710	114	.....	13	1 02	7.8	.....	967	98	.....	54	.....	26	1 49	6.7	.....	73	76	1	.....	169
Dutton—	1918	1,420	59	18,079	127	.....	12	98	7.8	.....	1,007	14	.....	62	.....	22	1 44	6.4	.....	1,001	85	3	.....	192
	1919	1,640	83	23,705	139	.....	14	99	6.9	.....	1,105	10	.....	70	.....	24	1 32	5.5	.....	2,539	93	3	.....	212
	1920	1,835	49	26,088	155	.....	14	99	7.0	.....	1,324	59	.....	71	.....	29	1 73	5.3	.....	2,359	98	3	.....	229
	1916	1,518	72	17,091	155	.....	.....	.....	8.9	.....	1,057	33	.....	67	.....	.....	.....	8.8	.....	.....	.....	.....	.....	222
	1917	1,619	86	12,821	170	.....	6	79	12.6	.....	954	19	.....	71	.....	26	1 12	4.3	Flat	30	00	1	.....	242
	1918	1,812	80	20,682	183	.....	9	85	8.7	.....	1,067	28	.....	82	.....	19	1 24	6.4	.....	782	44	1	.....	266
	1919	2,168	82	29,500	200	.....	12	90	7.4	.....	1,486	18	.....	83	.....	24	1 50	6.3	.....	713	92	1	.....	284
Durham—	1920	3,095	24	45,075	224	.....	17	1 15	6.7	.....	2,182	30	.....	86	.....	37	2 11	5.8	.....	2,430	41	6	.....	316
	1914	1,908	41	20,875	158	.....	.....	.....	9.5	11.4+10	2,020	81	.....	65	.....	.....	.....	7.1	11.4	1,876	49	8	.....	231
	1915	2,059	11	27,576	185	.....	13	1 00	7.5	.....	1,674	44	.....	85	.....	32	1 85	5.9	+1	2,801	33	10	.....	280
	1916	2,211	16	30,817	233	.....	12	88	7.2	.....	1,665	69	.....	92	.....	33	1 56	4.7	.....	3,635	22	12	.....	338
	1917	2,383	62	38,918	238	.....	14	84	6.1	.....	1,854	61	.....	91	.....	43	1 70	3.9	.....	3,613	47	13	.....	342
	1918	2,701	28	51,735	243	.....	17	93	5.2	.....	1,988	36	.....	89	.....	50	1 84	3.6	.....	4,277	44	14	.....	346
	1919	3,206	49	68,574	269	.....	21	98	4.7	.....	2,207	99	.....	79	.....	73	2 33	3.2	.....	4,621	96	13	.....	361
Elmira—	1920	4,582	08	123,941	313	.....	33	1 22	3.7	.....	2,821	51	.....	94	.....	73	2 50	3.4	.....	6,117	79	15	.....	422
	1914	1,908	41	20,875	158	.....	.....	.....	9.5	11.4+10	2,020	81	.....	65	.....	.....	.....	7.1	11.4	1,876	49	8	.....	231
	1915	2,059	11	27,576	185	.....	13	1 00	7.5	.....	1,674	44	.....	85	.....	32	1 85	5.9	+1	2,801	33	10	.....	280
	1916	2,211	16	30,817	233	.....	12	88	7.2	.....	1,665	69	.....	92	.....	33	1 56	4.7	.....	3,635	22	12	.....	338
	1917	2,383	62	38,918	238	.....	14	84	6.1	.....	1,854	61	.....	91	.....	43	1 70	3.9	.....	3,613	47	13	.....	342
	1918	2,701	28	51,735	243	.....	17	93	5.2	.....	1,988	36	.....	89	.....	50	1 84	3.6	.....	4,277	44	14	.....	346
	1919	3,206	49	68,574	269	.....	21	98	4.7	.....	2,207	99	.....	79	.....	73	2 33	3.2	.....	4,621	96	13	.....	361

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power							
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers	
Year	\$	Kw-hrs.		kwhr	\$ c.	cents	cents	\$	Kw-hrs.		kwhr	\$ c.	cents	cents	\$ c.					
Elora—	1915	1,044 49	14,009	89	18	1 08	7 4	10+25	1,820 07	25,431	60	38	2 48	7 1	10+25	197 78	1			150
	1916	1,253 03	20,500	105	23	1 02	6 1		1,828 25	27,945	63	52	2 52	6 5		972 12	2			170
	1917	1,400 12	31,600	123	18	1 02	4 4		1,937 30	40,200	64	52	2 52	4 8		3,640 75	2	120	30 34	189
	1918	1,537 70	28,173	134	21	1 09	5 4		1,765 65	34,357	59	46	2 39	5 1		5,087 10	2	162	31 40	195
	1919	1,809 72	34,910	139	21	1 09	5 2		2,093 34	45,935	65	59	2 65	4 5		7,440 12	3	242	30 74	207
	1920	2,256 60	49,514	186	22	1 01	4 6		2,362 02	57,754	70	69	2 81	4 1		6,997 35	3	212	33 01	259
Elmvale—	1913	284 34		52	10	1 03		None	358 60		52				None	438 38	1			105
	1914	673 18	6,856	57	10	87	9 9		896 11	15,402	48	25	1 49	5 8		1,186 44	2			107
	1915	704 12	7,728	78	10	87	9 1		778 93	16,193	64	25	1 16	3 9		1,043 96	2			144
	1916	816 74	10,562	81	11	85	7 7		736 74	18,644	62	25	97	5 0		810 96	3			146
	1917	881 20	11,868	89	11	86	7 4		696 79	13,041	61	19	95	5 3		3,699 00	3			153
	1918	941 28	12,895	91	11	87	7 2		873 52	16,755	57	23	1 23	5 2		3,860 83	4	159	23 26	152
	1919	1,027 05	13,781	98	12	87	7 2		1,030 63	18,028	57	26	1 51	5 8		3,722 19	5	145	26 63	160
	1920	1,313 94	16,383	101	13	1 08	8 0		1,120 45	22,548	63	30	1 48	4 9			5	149	24 98	169
Elmwood—	1918	282 62		30				None	83 93		15					896 32	1			46
	1919	467 59	6,266	32	16	1 22	7 5		196 91	2,858	17	14	96	6 9		1,429 31	1	47	30 41	50
	1920	592 57	7,950	33	20	1 50	7 4		351 78	5,273	19	24	1 63	6 8		1,514 17	1	46	33 00	53

Glencoe— 1920	630 50	124						8	675 34				56				10	130 68	2			182
Goderich—								9									9					
1914	7,197 05	400						8.6	4,196 49	79,874			155				5.3	1,240 73	10			565
1915	6,072 51	441	18	1 20				6.6	5,066 76	121,559			168				4.1	5,645 26	8			617
1916	7,086 32	511	19	1 24				6.5	5,253 15	98,221			159				5.4	5,498 56	19			679
1917	8,161 85	539	21	1 29				6.1	5,127 44	99,868			150				5.1	7,079 23	10	252	28 09	699
1918	7,980 21	566	20	1 20				5.9	4,663 62	86,241			147				5.4	12,485 34	16	428	29 17	729
1919	8,216 24	690	26	98				3.8	5,317 77	118,955			163				3.9	18,894 59	13	516	36 62	866
1920	10,687 31	793	21	1 12				5.2	6,367 10	152,382			179				4.2	16,550 96	17	403	41 07	989
Grand Valley—																						
1917	7,474	55	11	1 08				9.6	964 59	10,065			54				10+25		1			110
1918	10,089	58	14	1 25				8.4	967 98	11,113			48					1,581 78	2	38	41 62	108
1919	14,172	69	15	1 34				8.8	987 20	11,582			48					1,582 91	1	48	32 97	117
1920	19,477	87	19	1 65				8.8	1,484 90	16,388			50					1,631 54	1	48	33 99	138
Granton—																						
1917	5,782	42	12	96				8.4	176 93	1,774			16				10.0	333 85	1			59
1918	5,580	48	10	1 02				9.8	203 06	1,690			18				12.0	1,396 61	1	47	29 71	67
1919	7,000	51	11	1 08				9.4	265 43	1,750			21				15.2	1,321 67	1	41	32 23	73
1920	11,599	57	18	1 49				7.9	407 45	5,355			21				7.6	1,562 80	2	45	34 73	80
Gravenhurst—																						
1917	39,025	251	13	78				6.0	4,412 55	171,716			69				2.6	4,892 05	9	292	16 76	329
1918	37,930	264	12	64				5.2	4,624 55	141,329			59				3.2	4,786 06	8	352	13 59	331
1919	51,625	269	16	72				4.5	4,901 04	196,134			74				2.5	4,991 09	10	313	15 94	353
1920		290		81					4,762 31			80						6,576 74	12			382
Guelph—																						
1912	10,251 87	960							16,400 57				345				8+15	30,139 00	73			1,378
1913	11,528 07	1,260	17	87				5.2	15,075 61	287,561			400				5.2	42,091 34	85			1,745
1914	16,920 54	1,573	17	1 00				5.9	15,923 51	325,080			441				4.9	38,148 46	80			2,094
1915	15,514 10	1,824	18	76				4.2	12,692 86	437,567			474				2.8	38,404 28	81			2,379
1916	17,221 76	2,033	20	74				3.7	13,710 72	522,526			490				2.6	48,369 83	86			2,609
1917	19,379 44	2,202	23	77				3.3	13,760 01	576,911			505				2.4	57,380 71	87	2,578	22 26	2,794
1918	21,594 80	2,380	24	78				3.2	13,070 44	589,498			512				2.2	62,480 67	88	3,496	17 87	2,975
1919	25,157 62	2,677	27	89				3.3	15,487 44	783,989			529				2.0	54,810 39	89	3,437	15 95	3,295
1920	30,371 10	3,064	32	83				2.6	19,523 95	905,198			548				2.2	69,534 96	93	4,376	15 89	3,705

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Year	Domestic Light						Commercial Light						Power							
		Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers	
Hagersville—	1913	\$ 81 92		3							24						746 85	3			30
	1914	1,222 23	16,053	70			5.4	None		6,446	60			5.4			2,679 08	3			133
	1915	1,172 85	23,213	114	21	1 06	5.1		1,592 59	22,676	73	28	1 99	5.2			2,434 62	3			190
	1916	1,606 80	30,025	127	21	1 11	5.4		1,343 82	27,840	69	32	1 58	4.8			2,527 92	4			200
	1917	1,602 64	29,611	138	19	1 01	5.4		1,252 54	34,696	68	42	1 54	3.6			2,289 37	4	88	26 02	210
	1918	1,624 89	32,496	140	19	97	5.0		1,299 96	42,757	68	52	1 59	3.0			2,632 30	3	98	26 86	211
	1919	1,808 19	42,127	148	24	1 02	4.3		1,400 40	49,344	78	53	1 50	2.8			6,863 75	6	242	28 40	232
	1920	2,132 34	58,634	170	29	1 04	3.6		1,611 37	60,494	75	67	1 79	2.7			9,129 99	10	308	29 64	255
Hamilton—	1913	34,451 95	862,937	5,117					25,453 99	628,471	924					8	47,415 58	209			6,250
	1914	74,668 38	1,856,627	8,404			3.9	8+25	35,125 57	1,309,863	1,375	95	2 55	4.1			70,665 43	337			10,116
	1915	92,207 60	2,514,104	10,595	23	92	4		34,633 16	1,840,920	1,434	109	2 06	1.9			84,789 71	406			12,435
	1916	108,137 22	3,625,059	12,423	26	81	3.7		36,126 03	2,085,601	1,546	116	2 02	1.8			115,224 78	464			14,433
	1917	135,224 12	5,276,696	14,340	32	78	3		36,740 19	2,426,174	1,668	126	1 91	1.5			137,249 87	526	8,010	17 13	16,534
	1918	157,020 32	6,582,496	15,421	36	84	2.6		37,154 72	2,467,464	1,664	123	1 85	1.5			172,313 53	523	11,673	14 76	17,608
	1919	187,079 25	8,236,029	17,652	39	88	2.3		44,372 46	3,501,915	1,826	160	2 02	1.3			189,180 83	589	14,007	12 79	20,067
	1920	194,103 14	8,958,561	18,195	41	94	2.3		44,501 23	3,861,584	1,831	176	2 02	1.1			248,270 75	598	18,721	13 26	38,754
Hanover—	1918	3,981 55	29,694	335					3,403 10	47,384	92					12.5	8,034 96	9	169		436
	1919	4,708 40	83,594	337	21	1 16	5.6		3,023 83	56,924	97	49	2 60	5.3			14,737 24	10	413	35 68	444
	1920	6,599 51	123,161	435	24	1 26	5.3		3,852 40	76,626	92	53	3 49	6.5			16,954 80	14	604	28 07	541

Harriston— 1917 1918 1919 1920	1,556 49	18,184	132	12	98	8.6	10	1,935 38	21,868	68	27	2 37	8.8	10	2,686 93	6	78	34 45	206
	1,774 96	21,205	148	12	1 05	8.3		1,277 37	21,281	67	26	1 57	6.0		2,663 69	5	85	31 33	220
	2,063 50	28,480	175	14	1 04	7.4		1,828 60	25,227	76	28	2 01	7.2		4,394 24	10	136	32 31	261
	2,809 01	40,199	202	17	1 16	7.0		2,377 90	35,117	78	37	2 54	6.8		9,709 58	9	240	40 46	289
Hensall— 1917 1918 1919 1920	1,038 57	10,872	89	11	1 06	9.6	12+20	610 79	7,046	36	18	1 54	8.7	12+20	81 39	2			127
	1,226 25	11,323	105	9	96	10.8		661 21	5,792	40	12	1 45	11.4		1,729 36	5	57	30 34	150
	1,602 39	19,924	116	14	1 07	8.0		886 86	10,657	43	21	1 72	8.3		2,703 95	6	127	21 29	165
	1,864 17	23,805	120	16	1 29	7.8		1,083 69	11,877	43	23	2 10	9.1		1,776 05	6	115	15 44	169
Hespeler— 1913 1914 1915 1916 1917 1918 1919 1920	2,189 00		174	14	1 09	7.6	10+15	1,684 75		76				10+15	5,044 30	11			261
	2,635 41	34,848	229	11	90	7.0		1,934 75	35,979	85	37	2 00	5.4		6,116 27	13			327
	2,787 48	39,580	272	17	92	5.5		2,334 15	39,657	90	38	2 22	5.9		9,017 58	14			376
	3,011 73	54,239	277	19	1 04	5.5		2,012 28	44,900	84	43	1 93	4.5		11,177 71	12			273
	3,679 79	66,932	312	19	98	4.9		2,389 80	53,306	86	52	2 18	4.5		10,166 33	11	394	25 80	409
Hightgate— 1917 1918 1919 1920	416 49	4,447	41	9	85	9.4	None	467 76	4,373	21	17	1 86	10.7	None		1			63
	456 79	5,342	45	10	88	8.5		502 27	4,880	25	17	1 81	10.2		2,556 33	3	76	33 63	73
	618 65	6,410	51	11	1 01	9.2		598 12	7,224	29	21	1 72	8.3		2,071 70	3	79	26 22	83
	861 91	90,42	59	14	1 22	8.7		738 31	8,264	30	23	2 05	8.9		1,675 67	6	70	23 94	95
Holstein— 1917 1918 1919 1920	238 48	2,366	26	8	86	10.1	None	209 74	2,672	15	15	1 17	7.9	None					41
	256 54	1,957	27	6	80	13.1		263 55	2,505	16	13	1 41	10.5						43
	308 37	2,899	28	9	92	10.6		228 57	3,055	18	14	1 06	7.5		752 37	1	27	27 87	47
	459 38	5,368	29	16	1 32	8.5		405 80	2,883	18	13	1 88	14.1		109 47	1	7	15 63	48
Huntsville— 1917 1918 1919 1920	3,597 74		270				10	1,265 03		82					13,569 75	3			355
	3,614 59	41,768	272	12	1 11	8.6		1,802 91	31,142	83	31	1 82	5.7		13,881 58	3			358
	4,899 77	97,860	276	30	1 50	5.0		1,862 04	52,361	66	66	2 35	3.5		14,605 94	7			349
	6,953 49	141,862	335	35	1 73	4.9		3,233 63	57,880	93	52	2 89	5.6		15,311 98	6	832	18 40	434

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers

Municipality	Domestic Light										Commercial Light						Power			
	Year	Revenue \$ c.	Consumption Kw-hrs.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents	Net Cost prior to Hydro cents	Revenue \$ c.	Consumption Kw-hrs.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents	Net Cost prior to Hydro cents	Revenue \$ c.	Number of Consumers	Average Horse Power	Average Cost per Horse Power \$ c.	Total Number Consumers
Ingersoll—	1912	3,073 73	43,406	220	14	1 20	8.3	8+25	6,648 28	81,724	142	44	3 23	7.4	8+25	14,430 66	38			400
	1913	3,595 03	68,342	278	12	1 22	7.5		6,048 51	106,689	170	46	2 32	5.9		15,293 44	44			492
	1914	5,085 32	102,537	416	19	1 00	5.3		6,359 72	139,428	194	60	2 46	4.1		12,818 27	48			658
	1915	5,480 52	127,449	497	20	1 05	5.4		5,716 91	176,757	197	73	2 70	3.7		16,251 18	52			746
	1916	6,857 94	152,188	590	20	1 98	4.9		6,540 51	194,927	206	81	2 74	3.3		20,380 90	51	967	22 49	847
	1917	7,465 96	160,226	679	20	1 91	4.7		6,617 53	164,341	196	71	2 42	3.3		21,747 80	53	994	21 54	928
	1918	7,622 97	201,357	716	19	1 95	4.6		5,560 92	196,142	187	82	2 60	3.2		22,036 72	45	1,123	19 62	948
	1919	9,214 11	319,520	809	21	1 01	3.5		6,229 81	267,649	200	101	2 43	2.4		23,666 00	50	1,289	18 35	1,059
	1920	11,307 12		936	28				6,419 44		220						55			1,211
Kirkfield—	1920	78 91		20				None	320 95	5					None		1			26
Kitchener—	1912	14,585 02		1,022		1 10		11+25	19,080 32		422					28,654 23	105			1,549
	1913	15,291 37		1,291					19,548 91		470					35,655 90	127			1,888
	1914	17,757 08	359,307	1,694	20	99	4.9		19,549 45	562,630	519	95	3 29	3.5		49,173 17	130			2,343
	1915	19,108 60	494,725	2,032	22	85	3.9		16,807 15	579,303	546	91	2 63	2.9		54,732 50	138			2,716
	1916	20,876 63	582,754	2,407	22	79	3.6		17,323 67	801,789	543	123	2 65	2.2		62,436 31	147			3,097
	1917	24,051 18	748,390	2,712	24	78	3.2		17,494 18	866,798	577	129	2 60	2.2		84,818 46	157	4,012	21 14	3,446
	1918	26,810 70	860,230	2,822	25	80	3.1		17,033 78	885,734	547	123	2 52	2.0		93,522 21	155	4,621	20 23	3,524
	1919	31,643 49	1,108,883	3,251	29	81	2.8		20,095 87	1,193,095	586	170	2 87	1.7		112,988 87	167	5,791	19 51	4,004
	1920	39,506 53	1,513,601	3,524	36	93	2.6		25,744 25	1,474,127	611	201	3 51	1.7		143,025 34	179	7,083	20 19	4,314

Kingston— 1918 27,760 31 1919 32,247 30 1920 36,308 98	396,512 537,657 751,367	1,873 2,166 2,677	21 23	1 24 1 13	6.0 4.8			45,743 73 49,268 27 47,611 14	686,846 966,250 1,167,246	685 759 772	106 126	5 41 5 14	5.1 4.1	32,025 98 42,710 51 40,763 23	104 112 115	1,576 1,818	27 11 22 42	2,662 3,037 3,564
Lambeth— 1915 344 47 1916 575 65 1917 721 51 1918 833 23 1919 935 30 1920 1,242 88	2,991 6,880 7,655 9,978 10,761 14,627	49 54 65 63 75 72	11 11 13 12 18	91 1 04 1 08 1 04 1 55	11.5 8.4 9.4 8.3 8.7 8.5	None	119 00 208 96 252 56 208 28 289 64 339 28	1,042 2,577 1,976 2,701 3,179	9 13 13 11 16 14			11.4 8.3 9.8 10.5 10.7 10.7	559 82 249 36 182 50 392 22 309 87 312 00	1 1 1 1 2 2		26 00	59 68 79 75 93 88	
Lakefield— 1920 571 45		130					336 69			62				1,328 30	4			196
London— 1912 28,196 62 1913 41,932 42 1914 57,473 08 1915 57,184 75 1916 71,146 90 1917 86,454 36 1918 99,240 58 1919 118,188 27 1920 143,963 71	920,000 1,192,000 1,732,435 2,378,144 3,288,286 3,855,134 4,885,144 6,609,361	3,851 5,201 6,299 7,326 8,282 9,036 10,703 11,495 12,386	17 18 21 25 31 32 28 44	77 83 70 76 83 83 86 97	4.5 4.8 3.3 2.9 2.6 2.5 2.4 2.2	None 9+25	28,527 44 39,256 07 47,593 44 43,751 37 48,747 74 52,511 01 52,593 28 67,190 85 76,450 76	1,350,000 1,580,000 1,452,896 1,930,269 2,277,566 2,584,904 3,524,793 4,287,591	792 1,007 1,075 1,046 1,129 1,261 1,699 1,831 1,979		125 127 137 147 159 143 160 180	3 63 3 81 3 44 3 66 2 96 3 06 3 30	3.0 3 3 2.5 2.4 2.0 1.9 1.8	52,633 00 79,758 96 130,936 35 148,567 23 180,204 33 181,973 61 193,686 30 195,180 40 211,081 19	158 198 249 271 295 **328 **418 467 513		4,801 5,406 7,649 8,643 9,706 10,625 12,820 13,793 14,878	
Listowel— 1917 2,500 80 1918 3,820 77 1919 4,311 53 1920 5,657 29	54,842 65,119 89,975 137,168	243 256 332 377	19 21 23 30	86 1 27 1 08 1 25	4.6 5.8 4.8 4.1	10	3,168 19 2,820 74 2,971 08 3,884 08	51,233 58,248 71,343 102,600	125 128 135 132		34 38 44 65	2 11 1 85 1 91 2 62	6.2 4.8 4.2 4.0	3,385 58 7,180 07 10,922 17 13,143 78	12 13 18 20	112 233 281 363	30 23 30 81 38 86 36 21	380 397 485 529
Louth Twp.— 1918 1919 1920		24 30 46																24 30 46

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Year	Domestic Light						Commercial Light						Power						
		Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers
Lucan	1915	824 07		87	11	1 00	9 3		687 37		39	17	1 78	10 2		18 66	3			129
	1916	1,124 73	12,047	98	14	1 07	7 7		857 11		42	17	1 82	12 0		159 67	7			147
	1917	1,283 01	16,701	103	14	1 07	7 7		870 97		39	15	1 82	12 0		2,756 92	10	90	30 63	142
	1918	1,309 20	15,264	109	12	1 03	8 5		885 28		38	25	1 91	7 5		5,650 56	8	133	42 48	155
	1919	1,566 54	26,105	115	19	1 14	6 0		921 25		39	30	1 97	6 5		5,766 69	9	140	41 19	163
	1920	1,854 20	43,863	127	29	1 22	4 2		885 18		41	35	1 80	5 1		6,602 32	10	208	31 74	178
Lynden	1916	254 76	3,500	24			7 3	None	227 57		10			5 1	None	650 38	1			35
	1917	272 49	3,498	24			7 7		213 11		11			5 9		2,912 96	1	84	34 68	36
	1918	304 17	4,971	25	17	1 35	6 1		231 50		11	44	1 75	3 9		2,770 26	1	76	36 45	37
	1919	444 75	7,553	47	13	79	5 9		347 65		16	52	1 81	3 5		3,291 51	1	86	38 27	64
	1920	897 94	13,406	51	22	1 47	6 7		435 63		16	53	2 27	4 3		3,408 62	1	86	39 63	68
Milton	1913	1,149 28		110					1,212 26		74					6,462 38	5			189
	1914	1,961 22	25,649	150	19	1 51	7 6	10	2,226 80		79	44	2 43	5 4		11,325 61	6			235
	1915	1,981 80	28,900	170	15	1 03	6 8		1,900 98		80	44	2 00	4 6		5,364 29	7			257
	1916	2,219 28	36,573	197	16	1 01			1,892 21		84	45	1 93			10,428 79	6			287
	1917	2,528 88	50,695	174	24	1 11	5 0		1,863 60		70	44	2 21	5 4		7,968 76	6	309	25 79	250
	1918	2,852 66	64,485	227	27	1 18	4 4		1,759 69		73	41	2 05	4 9		6,497 73	7	333	19 51	307
	1919	3,908 62	149,879	276	45	1 18	2 6		2,041 31		76	47	2 22	4 8		11,109 72	12	234	47 48	364
	1920	4,099 80	105,398	289	30	1 16	3 9		2,365 05		76	66	2 60	3 9		15,142 22	13	733	20 66	378

Markham— 1920 1,735 33	130						790 25				33				10+25	577 79	4	35 16 51	167
Markdale— 1917 1,241 47 1918 1,672 90 1919 1,611 23 1920 2,054 17	106 108 124 114						1,105 58 862 43 937 23 1,321 06				68 66 64 69				10	718 89 697 58 1,140 94 1,513 24	3 5 2 8	51 94 16 09	177 179 190
Midland— 1912 5,878 05 1913 6,095 11 1914 6,941 07 1915 6,580 45 1916 7,145 74 1917 9,179 72 1918 10,341 29 1919 11,542 33 1920 16,362 07	420 491 621 689 732 822 937 1,050 1,091						5,878 05 6,104 16 5,084 06 4,462 54 4,624 85 5,651 06 6,149 35 5,303 02 7,435 12				165 172 176 188 184 186 195 237 191			9	3,188 03 5,700 22 6,484 43 10,229 52 12,262 89 15,300 91 24,529 03 22,070 30 18,060 43	18 25 32 39 31 35 38 34 40	714 21 43 1,160 21 14 790 27 93 1,245 14 51	603 688 829 916 947 1,043 1,170 1,321 1,322	
Mt. Brydges— 1915 333 43 1916 644 75 1917 540 17 1918 601 52 1919 811 17 1920 1,130 15	45 55 58 67 64 84						494 02 170 46 344 16 312 44 324 11 434 78				15 15 20 17 22 19			None	517 50 760 58 627 07 750 69 822 74 707 73	1 2 2 1 1 1	27 23 22 25 30 02 26 31 64 23 30 77	61 72 80 85 87 104	
Milverton— 1917 785 01 1918 1,007 75 1919 1,230 28 1920 1,677 24	65 75 104 131						1,200 09 1,403 46 1,442 81 1,494 72				59 65 66 63			None	2,899 56 7,533 28 8,897 49 8,687 03	4 5 5 6	80 36 24 207 36 39 267 33 32 272 31 93	128 145 175 200	
Mimico— 1913 2,021 06 1914 5,085 16 1915 5,748 44 1916 7,011 08 1917 7,400 73 1918 7,209 82 1919 8,759 21 1920 12,325 03	250 462 609 621 704 615 703 841						* * 346 49 506 44 883 24 942 82 1,061 76 1,305 90				*		8+25	795 49 963 64 1,042 11 1,449 14 2,750 59 4,357 12 4,189 20 3,896 30	5 5 3 8 11 9 9 8	133 20 68 195 22 34 192 21 82 189 20 62	255 477 619 660 754 656 746 894		

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light										Commercial Light						Power			
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers
Mitchell—	\$ c.	Kw-hrs.		kw-hr	\$ c.	cents	cents	\$ c.	Kw-hrs.			kw-hr	\$ c.	cents.	cents	\$ c.			\$ c.	
	1912	2,964 48					Flat	2,977 08			79					4,597 03	13			251
	1913	2,362 52						2,813 92			85					6,160 53	16			270
	1914	2,470 29						2,712 55			100					3,944 91	16			307
	1915	2,379 58						2,684 01			95					2,333 08	17			292
	1916	2,311 80	33,759	14	95	6.8		2,677 35			103	33	2 25	6.8		3,231 56	21	167	24 96	342
	1917	2,572 51	41,022	16	1 01	6.3		2,774 59			104	39	2 22	5.6		4,169 05	22	190	25 44	338
	1918	2,730 62	46,956	18	1 06	5.8		2,944 34			102	41	2 38	5.7		4,834 06	22	190	25 44	341
	1919	2,816 95	41,556	13	88	6.8		3,136 32			105	41	2 49	6.1		4,869 61	21	196	24 84	392
	1920	4,183 47	89,601	25	1 17	4.7		3,588 97			106	61	2 82	4.6		5,798 65	21	224	25 89	425
Moorefield—																				
	1918	175 36					None	217 24			15					888 57	1			32
	1919	341 45	3,507	14	1 35	9.7		342 50			15	16	1 90	11.9		1,292 62	2	40	32 32	38
	1920	498 92		26	1 60			431 99			17		2 12			1,262 83	2	38	33 23	45
Mt. Forest—																				
	1916	1,967 03	27,337	106		7.2	10	2,420 75			164			6.2		1,739 79	7			277
	1917	2,171 91	40,286	176	1 28	5.4		2,556 41			107	30	1 99	6.7		2,533 40	4	136	19 63	287
	1918	2,171 73	32,336	187	14 99	6.7		2,419 72			107	32	1 88	5.7		3,132 19	4	147	21 30	298
	1919	2,596 70	43,495	196	1 10	6.0		2,809 05			117	42	2 00	4.7		3,561 63	5	152	23 43	318
	1920	2,959 09	48,732	205	1 20	6.0		3,625 36			127	41	2 38	5.8		4,182 42	9	207	20 20	344
Neustadt—																				
	1919	419 91	5,586	45	78	7.8	12.5	475 59			24	25	1 65	6.6		389 93	2	16	24 37	71
	1920	813 48	14,425	51	1 33	5.6		526 21			26	26	1 69	6.5		2,656 17	4	88	30 18	81

Niagara-on-the-Lake												
1919	274	1 68	2,796 38	58	3 38	1,301 68	5	78	16 69	337		
1920	275			69			5			349		
Niagara Falls—												
1916	2,050	31	13,259 02	400	2 27	9,613 01	80	713	13 49	2,530		
1917	2,273	99 2.6	11,012 51	405	2 16	18,804 36	55	1,480	15 03	2,733		
1918	2,447	93 2.9	10,692 04	418	2 31	22,242 65	61	1,905	12 96	2,926		
1919	2,648	1 05 2.4	12,639 15	456	2 62	24,686 72	75	2,102	13 67	3,179		
1920	2,907	68 1 34 2.0	15,366 26	488		28,739 95	86			3,481		
New Hamburg—												
1912	124		1,423 35	63		3,369 05	5			194		
1913	142		1,890 72	63		5,792 20	8			212		
1914	170	12	1,403 56	68	1 78	5,209 51	6			243		
1915	187	16 88 4.9	1,273 38	70	1 54	2,825 57	4			261		
1916	196	16 79 5.5	1,211 25	70	32 1 39	1,646 90	4			270		
1917	184	18 93 5.1	1,481 03	69	41 1 79	4,299 65	9	188	22 87	262		
1918	192	20 1 03 5.0	1,410 88	67	49 1 73	4,784 71	9	220	21 74	268		
1919	208	19 1 04 5.5	1,540 57	64	52 2 01	5,517 79	10	244	22 61	282		
1920	222	27 1 12 4.1	1,615 92	66	48 2 04	5,613 62	12	240	23 39	300		
New Toronto—												
1914	100			4		2,140 36	1			105		
1915	153			8		9,744 31	2			163		
1916	210		143 32	10		30,726 27	4			224		
1917	320	14 77 5.3	566 42	22	2 95	64,854 91	8	1,554	19 77	350		
1918	400	11 60 5.1	1,113 87	22	4 22	79,353 15	10	2,689	24 11	432		
1919	473		3,143 60	41		97,272 13	14			528		
1920	537	28 1 02 3.6	2,979 37	57	4 36		12			606		
Norwich—												
1912	128	x	674 48	64		263 93	2			194		
1913	166	15 1 09 6.8	1,162 98	76	1 38	1,978 55	3			245		
1914	198	16 99 6.2	995 16	84	2 1 04	1,893 72	3			285		
1915	228	16 99 6.2	1,075 79	80	2 1 09	2,169 31	5			313		
1916	254	18 84 4.7	1,168 34	87	25 1 16	2,642 97	6			327		
1917	356	16 1 06 3.4	1,198 97	82	25 1 19	4,116 38	10	137	30 05	448		
1918	242	30 1 05 3.5	1,064 13	78	24 1 11	2,481 63	8	87	28 52	328		
1919	280	30 1 05 3.5	1,566 15	76	37 1 55	2,370 22	8	97	24 44	364		
1920	291	34 1 18 3.5	1,915 42	84	42 1 90	2,902 47	10	111	26 15	385		

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power								
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Kw-hrs.	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers		
Year	\$	c.	Kw-hrs.	kw-hr	\$	c.	cents	\$	c.	cents	kw-hr	\$	c.	cents	\$	c.		\$	c.		
Oil Springs—	1918	87	68	18			None	73	85		7				2,240	03	2			27	
	1919	214	44	20				173	97		10				4,151	58	3			33	
	1920	366	49	20				319	75		12				5,684	03	6			38	
Orangeville—	1917	1,641	42	144	13	95	7.2	1,903	38		82	33	1	93	2,902	60	4	133	22	58	230
	1918	1,891	77	155	17	1 05	6.2	2,081	03		90	42	2	01	3,197	89	5	97	32	96	250
	1919	2,390	39	179	19	1 11	6.0	2,352	35		97	54	2	02	3,797	70	7	141	26	93	283
	1920	2,891	19	199	21	1 21	5.8	2,852	54		94	42	2	53	4,127	67	10	208	19	84	303
Omamee—	1918	480	37	58			Flat	419	07		23				54	78	3				84
	1919	733	28	70	12	87	7.0	623	24		29	24	1	79	670	27	5	39	17	19	104
	1920	999	89	83				681	07		24				248	29	5				112
Otterville—	1917	537	88	42			None	290	37		23				47	44	1				66
	1918	615	32	47	14	1 15	7.9	272	50		22	13	1	01	912	05	2	22	41	45	71
	1919	861	40	62	15	1 16	7.7	440	31		15	13	2	45	982	80	4	26	37	80	81
	1920	1,156	08	70	18	1 38	7.8	648	41		20	33	2	70	1,770	64	4	43	41	18	94

Ottawa— 1912 62,598 18 1913 68,032 27 1914 68,767 48 1915 67,441 19 1916 72,875 12 1917 81,506 24 1918 88,020 83 1919 97,402 16 1920 109,844 13	5,390	19	1 02	5	7+8	51,365 91 53,438 04 51,769 72 46,636 99 42,569 96 48,546 77 50,733 92 52,187 97 62,833 70	440	106	7 08	4 9	7+8	25,299 94 26,978 76 31,748 23 32,126 50 42,996 39 63,173 09 64,655 78 63,255 59 61,681 26	90	17 72 13 63 14 37 13 61	5,920 6,736 7,350 8,538 9,207 10,007 10,436 10,393 10,939
	5,766	22	8 05	3 8		53,438 04 51,769 72 46,636 99 42,569 96 48,546 77 50,733 92 52,187 97 62,833 70	818	131	5 16	3 1		26,978 76 31,748 23 32,126 50 42,996 39 63,173 09 64,655 78 63,255 59 61,681 26	152	24 37 27 21 23 17 20 02	6,736 7,350 8,538 9,207 10,007 10,436 10,393 10,939
	6,342	23	8 05	3 4		51,769 72 46,636 99 42,569 96 48,546 77 50,733 92 52,187 97 62,833 70	852	137	4 07	2 4		31,748 23 32,126 50 42,996 39 63,173 09 64,655 78 63,255 59 61,681 26	140	23 17 20 02	7,350 8,538 9,207 10,007 10,436 10,393 10,939
	7,338	24	8 05	3 4		46,636 99 42,569 96 48,546 77 50,733 92 52,187 97 62,833 70	1,000	150	3 27	2 4		32,126 50 42,996 39 63,173 09 64,655 78 63,255 59 61,681 26	188	20 02	8,538 9,207 10,007 10,436 10,393 10,939
	7,912	31	8 05	2 3		42,569 96 48,546 77 50,733 92 52,187 97 62,833 70	1,107	167	3 57	2 4		42,996 39 63,173 09 64,655 78 63,255 59 61,681 26	204	20 02	10,007 10,436 10,393 10,939
	8,636	45	8 05	2 0		48,546 77 50,733 92 52,187 97 62,833 70	1,167	212	3 59	1 6		63,173 09 64,655 78 63,255 59 61,681 26	207	20 02	10,436 10,393 10,939
	9,047	53	9 07	1 8		50,733 92 52,187 97 62,833 70	1,182	212	3 59	1 6		64,655 78 63,255 59 61,681 26	207	20 02	10,393 10,939
	8,976	53	9 07	1 8		52,187 97 62,833 70	1,212	212	4 10	1 9		63,255 59 61,681 26	210	20 02	10,939
	9,451		9 07	1 8		62,833 70	1,278	212	4 10	1 9		61,681 26	210	20 02	10,939
Owen Sound— 1916 16,003 61 1917 15,740 76 1918 16,071 58 1919 17,879 28 1920 21,798 34	1,376	16	9 07	7 1	6+15	23,724 21 13,809 11 14,011 58 13,931 89 15,160 58	435	6	2 71	6 1	6+15	13,772 61 28,667 22 32,069 70 23,289 00 24,645 8	83	1,170 1,177 1,003 1,231	1,894 1,941 1,979 2,121 2,415
	1,438	17	9 07	5 9		13,809 11 14,011 58 13,931 89 15,160 58	419	6	2 84	4 1		28,667 22 32,069 70 23,289 00 24,645 8	84	24 37 27 21 23 17 20 02	1,941 1,979 2,121 2,415
	1,492	31	9 07	3 0		14,011 58 13,931 89 15,160 58	403	104	2 78	2 7		32,069 70 23,289 00 24,645 8	92	23 17 20 02	1,979 2,121 2,415
	1,611	32	9 07	3 0		13,931 89 15,160 58	418	9	2 81	2 9		23,289 00 24,645 8	101	20 02	2,121 2,415
	1,861		9 07	3 0		15,160 58	449					24,645 8	101	20 02	2,415
Park Hill— 1920 1,530 39	120				10+25	1,106 09	58				10+25	110 15	1	10	179
Pictou— 1919 1920 9,915 08	604 657	16	1 26	8 0	12.5	9,480 61	175 222	46	3 56	7 8	12.5	1,239 91 9,477 94	26 32	52 23 84 303 31 28	805 911
Palmerston— 1916 6,102 25 1917 2,506 76 1918 2,563 63 1919 3,253 16 1920 4,283 77	151 171 177 213 234	16 11 21 36	1 22 1 22 1 27 1 53	7 7 7 7 6 2 4 2	Flat	282 57 2,780 86 2,729 69 3,344 29 4,036 64	63 71 69 75 75	60 60 61 101	3 26 3 24 3 72 4 50	5 5 5 3 6 1 4 5	Flat	1,225 68 1,401 26 2,161 21 3,235 10	1 2 2 4 5	57 21 50 57 24 58 85 25 43 128 25 27	215 244 248 292 314
Paris— 1914 4,766 23 1915 5,071 54 1916 5,877 57 1917 6,620 91 1918 7,839 11 1919 7,447 39 1920 7,696 27	354 477 552 581 625 663 757	17 21 23 21 30 26	1 01 96 98 1 08 94 85	5 8 4 6 4 2 5 0 3 1 3 2	7+10	2,778 09 4,063 03 3,805 95 4,303 71 4,339 77 4,436 78 4,411 23	142 150 150 161 162 168 182	57 53 56 44 45	2 32 2 11 2 31 2 23 2 20 2 02	4 3 4 1 3 9 4 0 4 9 4 9	8+20	1,419 90 6,328 33 8,974 66 8,828 42 12,951 24 14,226 43 16,414 88	1 4 4 5 8 12 13		497 631 706 747 795 843 952

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power								
	Year	Revenue \$ c.	Consumption Kw-hrs.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents	Net Cost Prior to Hydro cents	Revenue \$ c.	Kw-hrs.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents.	Net Cost Prior to Hydro cents	Revenue \$ c.	Number of Consumers	Average Horse Power	Average Cost per Horse Power \$ c.	Total Number Consumers	
Penetang—	1912	1,676 26		101				9	3,836 30		87						2,207 51	13			201
	1913	1,989 80	27,199	128	19	1 44	7.3		4,511 16	58,111	91	55	4 23	7.7			8,775 95	15			234
	1914	1,936 73	35,163	153	21	1 15	5.5		3,064 83	66,489	100	58	2 68	4.6			8,001 69	15			268
	1915	2,050 69	42,483	174	22	1 04	4.8		2,676 60	78,657	102	65	2 21	3.4			10,048 08	15			291
	1916	2,317 37	49,242	189	23	1 06	4.7		2,706 74	83,448	95	71	2 30	3.2			11,650 03	16			290
	1917	2,486 82	62,546	199	27	1 07	4.0		2,677 81	80,783	93	72	2 38	3.3			10,234 73	14	476	21 50	306
	1918	2,855 29	76,516	215	30	1 15	3.7		2,363 45	71,085	95	63	2 09	3.3			9,701 55	14	350	27 71	324
	1919	3,074 74	83,950	263	27	97	3.6		2,874 63	94,491	107	74	2 24	3.0			15,438 43	19	681	22 67	389
	1920	4,971 07	116,449	328	28	1 26	4.5		3,340 35	119,686	91	110	3 06	2.8			22,164 67	25	934	23 73	444
	Peterborough—	1914	8,661 71		2,692				Flat	7,749 91		507						7,013 23	93			3,292
1915		27,998 24		3,221		79			27,563 41		602		4 14				30,185 83	113			3,936
1916		31,020 72	510,359	3,401	13	78	6.1		26,403 82	467,663	602	65	3 66	5.6			36,597 04	117			4,120
1917		40,043 65	973,937	4,152	22	88	4.1		26,601 65	613,865	671	80	3 49	4.3			46,235 49	122	2,871	16 10	4,945
1918		43,049 23	1,166,437	4,409	22	83	3.6		24,679 61	883,196	699	107	3 00	2.7			48,055 38	119	3,432	14 00	5,227
1919		46,282 34	1,378,472	4,257	27	91	3.3		27,616 40	1,207,218	652	164	3 53	2.2			38,930 06	119	2,317	16 80	5,028
1920		51,291 38	1,659,204	4,463	31	96	3.1		30,144 81	1,595,400	689	193	3 64	1.9			51,072 38	121	3,109	16 43	5,273

Petrolia— 1917 1918 1919 1920	3,346	54	54,138	292	15	95	6.1	14+20	3,837	48	61,972	150	34	2 13	6.2	14+20	6,666	29	34	216	30 86	476
	4,096	58	64,342	315	17	1 12	6.3		4,138	05	64,510	158	34	2 23	6.4		11,491	46	40	345	33 30	513
	5,024	22	88,243	367	20	1 14	5.7		4,761	37	81,003	163	41	2 43	5.9		16,712	15	53	497	33 62	583
	6,034	68	112,806	427	22	1 18	5.3		5,447	61	94,755	176	45	2 58	5.7		19,193	71	59	581	33 04	662
Plattsville— 1915 1916 1917 1918 1919 1920	551	39	6,061	56			9.1	None	477	71	5,091	20			9.4	None	1,128	27	4			80
	666	30	7,422	60	11	96	9.0		580	62	5,900	22	14	1 35	9.8		1,436	62	3			85
	670	35	7,220	60	10	9 3	93		583	58	6,714	22	25	2 21	8.7		768	37	2	37	20 77	84
	699	99	9,011	60	11	97	8.7		636	88	8,489	23	31	2 35	7.5		1,596	81	2	60	26 60	85
	795	79	8,967	62	12	1 07	8.9		826	27	15,051	27	46	2 40	5.2		3,053	72	2	65	46 98	91
	969	31	11,294	65	14	1 24	8.6		873	81	14,655	26	47	2 80	6.0		3,155	32	3	92	34 30	94
Perth— 1919 1920	8,477	47	137,658	479	24	1 47	6.2		6,748	11	143,305	157	76	3 58	4.7		8,550	93	15	250	34 20	651
	10,216	95	218,792	564	32	1 51	4.7		7,025	19	122,988	166	62	3 53	5.7		15,648	27	19	494	31 68	749
Port Colborne— 1920	4,301	69	101,020	465	25	1 00	4.2		3,082	14	89,448	132	80	2 25	3.5		2,718	09	13	140	19 45	610
Port Arthur— 1913 1914 1915 1916 1917 1918 1919 1920	81,830	66		2,409				8+25	*			500				8+25	51,748	11	55			2,464
	38,097	65		2,969					32,933	91		550					92,804	49	55			3,574
	32,048	37		2,800					28,662	58		550					85,060	78	50			3,900
	31,152	52		2,701					27,439	63		481					96,913	51	46			3,228
	33,358	31		2,783					28,235	05		503					111,367	47	42	50'93	21 88	3,328
Pt. Credit— 1913 1914 1915 1916 1917 1918 1919 1920	37,216	29	1,157,382	2,807	34	1 11	3.2		31,612	57	919,826	535	147	5 07	3.4		142,118	26	42	6,967	20 39	3,384
	41,584	37	1,342,696	2,633	43	1 32	3.1		33,390	02	978,503	625	131	4 45	3.4		168,517	53	58	8,420	20 01	3,316
	45,432	34	1,641,294	2,960	45	1 28	2.8		32,165	55	1,078,290	590	152	4 54	3.0		178,529	32	59	8,983	19 87	3,609
									*													
									*													
Pt. Credit— 1913 1914 1915 1916 1917 1918 1919 1920	1,963	22		93				None				21				None	848	59	2			116
	2,461	42	41,862	125			6.0		*			35					308	88	2			162
	1,975	29	36,484	141	23	1 24	5.4		587	11	17,934	33	44	1 18	3.3		236	47	3			177
	1,781	49	44,251	145	26	1 04	4.0		464	02	13,800	33	35	1 17	3.3		257	40	3			181
	1,822	36	42,378	162	23	98	4.3		452	84	12,833	33	33	1 14	3.5		246	63	3	23		198
1918 1919 1920	2,107	78	58,660	164	29	1 07	3.5		509	82	15,875	33	40	1 28	3.2		203	48	3	23		200
	2,459	05	78,097	182	36	1 13	3.1		669	12	16,213	39	35	1 43	4.1		245	57	3	23		224
	3,173	10	96,791	199	40	1 33	3.3		1,164	86	42,568	44	81	2 21	2.7		406	02	3	33	12 30	246

[illegible]

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light							Commercial Light							Power					
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers	
Rockwood—	1913	230 27		48	13	1 38	8 8	None	*		9				None	480 82	1			58
	1914	848 55	7,824	54	13	1 03	7 7	None	*		7			8 8		1,542 01	3			64
	1915	731 97	9,500	65	13	1 03	7 7		251 27	3,300	10	32	2 46	7 7		907 57	3			78
	1916	733 66	11,263	72	14	89	6 5		388 05	5,930	11	47	3 08	6 4		903 57	5			87
	1917	795 54	12,740	77	14	90	6 2		380 90	6,061	15	39	2 44	6 3		1,097 05	3	59	18 60	95
	1918	860 14	13,242	79	14	91	6 4		372 56	5,812	14	33	2 14	6 4		1,087 21	4	59	18 43	97
	1919	1,023 14	17,602	93	16	92	5 8		384 46	6,571	17	32	1 90	5 9		1,177 94	4	59	19 97	114
	1920	1,382 39	22,935	94	20	1 23	6 2		408 73	6,116	18	28	1 89	6 7		1,310 28	4	60	21 84	116
Rodney—	1917	587 46		57				None	665 84		41				None					98
	1918	794 65	6,522	63	9	1 10	12 0		911 63	7,916	44	15	1 78	11 5						107
	1919	1,050 66	10,423	78	11	1 12	10 1		1,124 65	9,712	46	18	2 04	11 4		1,657 98	2	47	35 28	126
	1920	1,516 38	15,389	104	12	1 21	9 9		1,373 38	12,641	53	20	2 16	10 9		1,506 77	2	55	27 40	159
Sarnia—	1917	25,655 32	385,770	2,150	15	99	6 6	6	18,724 77	405,824	439	75	3 55	4 4	5—4	33,693 36	58	1,014	33 23	2,647
	1918	28,772 83	549,370	2,380	20	1 05	5 2		19,935 11	494,635	445	93	3 75	4 0		35,272 45	62	1,110	31 78	2,887
	1919	33,920 44	720,871	2,681	22	1 05	4 7		22,668 63	534,075	492	91	3 84	4 2		68,714 03	70	2,065	33 28	3,243
	1920	44,174 44	1,028,520	2,918	29	1 26	4 3		28,041 43	566,212	477	98	4 90	5 0		100,632 53	65	2,687	37 45	3,460

Scarboro Twp.— 1919..... 1920.....	58,961 144,202	428 652	12 18				None	*	4,054 3,374	9 8	30 35			None	3,083 31	1 3	59	52 26	438 663
Seaforth— 1913..... 1914..... 1915..... 1916..... 1917..... 1918..... 1919..... 1920.....	24,665 37,453 43,162 51,884 59,870 65,761 80,479 94,972	178 211 238 280 298 311 326 400	16 16 17 17 18 21 20	1 06 96 97 96 99 1 08 96	8 6 6 8 6 0 5 9 5 8 5 6 5 2 4 8		8+25	2,876 47 2,581 30 2,724 84 2,941 03 2,902 34 2,874 71 3,460 97 3,764 88	34,789 45,492 48,840 56,380 49,593 50,140 62,055 79,380	105 112 111 110 112 108 119 117	35 37 43 37 38 43 56	1 98 2 03 2 22 2 16 2 17 2 42 2 68	8 3 5 6 5 6 5 2 5 8 5 7 5 6 4 8	8+25	7,509 99 7,707 01 7,685 52 9,684 11 15,125 30 21,124 99 12,054 95 9,860 95	10 10 11 12 13 12 13 13			293 333 360 402 423 431 455 530
Shelburne— 1917..... 1918..... 1919..... 1920.....	28,451 31,280 40,546 42,896	133 142 170 182	18 19 20 19	10 2 1 06 1 00 1 18	5 7 5 5 5 0 6 1		10	1,362 06 1,416 45 1,645 38 2,084 51	23,807 25,820 32,215 34,331	74 76 76 81	27 28 35 35	1 53 1 57 1 80 2 14	5 7 5 4 5 1 6 1	10	620 14 2,465 07 2,606 52 4,086 32	4 5 3 9	28 102 107 173	22 15 24 16 24 36 23 62	210 223 249 272
Simcoe— 1915..... 1916..... 1917..... 1918..... 1919..... 1920.....	5,227 13,238 25,468 29,766 40,838 63,962	35 57 79 103 134 176			6 7 6 5 5 3 5 1 5 5 4 6			1,386 89 2,292 28 3,054 71 3,134 81 4,431 49 5,036 58	26,852 46,254 71,756 75,588 96,254 131,406	61 84 103 111 126 136	53 65 59 62 80	2 63 2 74 2 44 2 93 3 09	5 1 5 0 4 3 4 1 4 7 3 8		766 42 1,386 33 1,819 98 2,012 87 2,766 80 2,856 90	8 12 16 16 18 20			153 198 230 278 332
Smith's Falls— 1919..... 1920.....	303,116	1,017 1,121	25	1 05	4 2			8,267 12 11,655 03	216,517	226 240	80	3 05	3 8		12,127 54 22,392 75	28 31	438 668	27 69 33 50	1,271 1,394
Springfield— 1918..... 1919..... 1920.....	7,332 9,413 10,813	40 47 50					None	526 02 635 08 697 17	6,161 8,595 8,281	18 21 21				None	650 34 545 33 648 72	2 2 2	25 28 28	60 70 73	
Stamford Twp— 1920.....		673								27					7,276 54	11			711

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power						
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost Prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost Prior to Hydre	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers
Stratford—																			
1912	6,942 56		640		90		12+25	14,661 16		316		3 86		12+25	8,834 40	76			1,032
1913	11,550 71		1,042		1 02			17,072 61		367		4 15			14,272 59	92			1,501
1914	15,180 91		1,403	18	1 03	5.5		16,336 30		396	76	3 55	4.7		16,519 24	99			1,898
1915	16,967 58		1,724	21	90	4.4		14,766 75		439	79	2 92	3.7		15,415 78	104			2,267
1916	20,108 76		1,993	26	90	3.6		14,803 08		463	110	2 75	2.5		23,506 12	103			2,559
1917	26,614 85		2,492	31	99	3.2		16,385 81		388	120	3 21	2.6		27,846 16	112	1,167	23 86	2,992
1918	29,314 17		2,626	34	95	2.7		15,261 26		399	109	3 23	2.9		27,845 41	118	1,234	22 56	3,143
1919	35,342 84		2,898	40	1 02	2.6		17,330 26		408	130	3 54	2.7		26,420 07	124	1,250	21 14	3,430
1920	41,679 50		3,193	51	1 09	2.1		19,050 82		423	154	3 75	2.4		34,923 07	137	1,618	21 58	3,753
Strathroy—																			
1915	3,380 78		233			9.3	12+25	4,701 76		147					700 49	5			385
1916	3,318 45		314	16	1 01	6.5		3,817 38		152	37	2 12	5.8		2,927 36	8			474
1917	4,355 25		375	17	1 05	6.1		3,554 88		153	34	1 94	5.7		4,138 79	11	175	23 65	539
1918	4,926 25		381	23	1 08	4.6		3,588 67		142	41	2 02	4.8		7,447 74	12	727	10 24	535
1919	5,589 48		417	23	1 12	4.9		4,228 41		147	51	2 40	4.7		7,064 29	13	258	27 38	577
1920	6,891 04		479	27	1 20	4.4		5,037 74		159	61	2 64	4.3		11,192 48	22	502	22 29	660
Stayner—																			
1913	158 48		120					116 91		30					301 86	2			152
1914	909 58		108	7	66	9.9		747 93		56	20	1 45	6.7	Flat	1,699 08	2			156
1915	995 47		106	9	78	8.4		933 55		56	20	1 39	6.8		1,694 94	2			164
1916	1,012 15		115	9	76	9.2		997 39		65	18	1 37	7.7		1,835 29	3			183
1917	1,109 46		124	10	78	7.9		957 56		59	23	1 29	5.6		1,009 88	5	44	22 95	188
1918	1,180 03		132	10	76	7.0		914 85		57	22	1 31	5.8		1,982 63	4	78	25 41	193
1919	1,368 49		134	14	85	6.1		1,334 50		60	30	1 85	6.1		3,382 97	5	134	25 23	199
1920	1,896 77		151	14	1 05	7.7		1,683 99		62	36	2 26	6.3		3,826 06	5	171	22 38	218

Sunderland— 1915 1916 1917 1918 1919 1920	794 83	7,714	57	11	1 06	9.8	12.5	939 85	9,644	36	45	1 92	9.0	12.5	211 86	1	34	21 50	93
	752 64	10,369	61	15	1 29	8.3		840 22	10,108	37	26	1 94	7.4		731 14	2	30	27 50	99
	858 64	11,631	58	15	1 33	8.4		745 91	7,867	27	22	2 11	9.3		825 04	1	30	33 37	87
	988 01	14,103	65	17	1 32	8.0		735 19	10,497	31	24	2 36	9.8		1,001 01	1	30	26 35	97
	1,123 51	17,349	71	18	1 66	9.1		905 32	10,876	32	27	2 60	9.7		790 48	1			104
St. Catharines— 1914 1915 1916 1917 1918 1919 1920	2,013 48	53,572	833			3.7	7	412 75	22,843	92			1.9	7	12,742 98	20			945
	9,540 70	273,389	1,612	19	65	3.5		3,810 11	196,056	192	115	2 23	1.9		25,193 30	34			1,838
	16,419 57	591,765	2,410	24	68	2.8		5,925 49	318,877	247	121	2 25	1.5		40,688 67	48			2,705
	24,275 56	1,038,894	2,833	31	77	2.3		6,024 34	392,524	270	127	1 99	1.5		71,138 36	52	4,418	16 10	3,155
	30,187 05	1,448,273	3,022	40	84	2.0		6,028 41	374,447	279	113	1 83	1.6		94,632 33	53	4,873	19 41	3,454
St. George— 1915 1916 1917 1918 1919 1920	203 23		39	20	1 46	7.2	None	139 16	7,031	14	31	2 08	6.7	None	311 30	1			54
	832 23	11,483	56	22	1 50	6.8		474 38	8,067	24	29	1 74	5.9		583 52	2			82
	1,046 91	15,314	60	18	1 53	8.1		478 96	8,405	23	29	1 58	5.4		642 64	3	35	18 36	86
	1,138 63	14,034	64	21	1 64	7.8		456 16	10,711	25	36	1 99	5.5		1,379 58	4	44	31 35	93
	1,399 56	17,841	71	20	1 45	7.1		595 23	13,764	25	48	2 47	5.2		2,254 91	4	75	30 06	100
St. Jacobs— 1918 1919 1920	570 67	7,000	43				None	711 98		24					2,010 11	4	71	28 31	108
	615 87	7,992	48	14	1 07	7.7			7,559	21				None	311 30	1			65
	742 62	14,600	60	20	1 03	5.1		517 40	6,462	22	24	1 96	8.0		583 52	2	66	30 87	72
								494 93	4,588	14	26	2 78	10.8		642 64	2			76
															1,379 58				
St. Mry's— 1912 1913 1914 1915 1916 1917 1918 1919 1920	4,967 16		240	12	1 00	8.5	9+15	4,069 20	62,486	143				9+15	6,001 30	20			403
	3,815 77	44,801	396	13	90	6.7		4,553 73	75,257	160	34	2 50	7.3		8,221 72	29			588
	4,614 95	67,375	454	13	90	6.9		4,733 33	75,644	161	39	2 46	6.3		10,610 05	30			645
	5,073 97	72,819	528	12	86	3.9		4,222 53	79,768	151	40	2 25	5.5		8,379 87	33			712
	5,020 33	127,274	563	19	77	4.0		3,161 26	87,774	161	42	1 69	4.0		9,266 74	28	472	18 67	752
	5,552 22	140,001	583	20	81	3.6		3,052 62	86,665	161	45	1 58	3.5		8,814 71	30	426	19 97	774
	6,341 15	173,316	606	24	88	3.4		2,973 06	133,805	180	42	1 45	3.4		8,510 57	34	487	18 47	820
	8,046 60	233,881	728	27	92	3.1		3,526 28	154,624	151	74	1 95	2.6		8,996 31	32	671	23 10	911
	9,598 64	306,916	759	34	1 05	3.1		4,593 72		151	85	2 53	3.0		15,497 27	40			950

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power								
	Year	Revenue \$ c.	Consumption Kw-hr.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents	Net Cost prior to Hydro cents	Revenue \$ c.	Consumption Kw-hrs.	Number of Consumers	Avg Monthly Consumption kw-hr	Average Monthly Bill \$ c.	Net Cost per Kw-hr. cents	Net Cost Prior to Hydro cents	Revenue \$ c.	Number of Consumers	Average Horse Power	Average Cost per Horse Power \$ c.	Total Number Consumers	
St. Thomas—	1912	7,596 01		620				11	18,741 74		300					11	14,761 30	60			980
	1913	11,125 50	187,000	951	19	1 18	5.9		16,097 41	272,000	329	72	4 26	5.9			36,550 26	70			1,350
	1914	13,221 00	277,539	1,499	19	90	4.8		13,480 75	346,994	384	81	3 15	3.9			44,247 13	92			1,975
	1915	16,517 37	460,103	1,903	23	81	3.6		13,422 48	504,679	434	102	2 73	2.7			44,780 45	101			2,438
	1916	20,210 52	629,102	2,241	25	81	3.2		15,145 47	607,131	464	93	2 81	2.5			46,698 91	107			2,812
	1917	22,620 72	759,512	2,524	27	79	3.0		14,843 27	600,317	472	107	2 64	2.5			44,977 52	112	2,349		3,108
	1918	25,561 20	877,011	2,654	28	82	2.9		12,332 86	694,990	481	121	2 15	1.7			53,973 48	112	2,546		3,247
	1919	29,904 22	1,001,693	3,073	27	81	2.9		14,958 16	796,838	504	132	2 47	1.9			54,035 16	112	2,754		3,689
	1920	39,060 45	1,486,606	3,485	36	93	2.6		19,489 14	868,845	523	138	3 10	2.2			53,682 89	112	3,167		4,120
	Tara—																				
1918	428 50		45					None	392 66		34						352 49	1			80
1919	601 28	9,807	59	14	85	6.1			694 94	11,526	38	24	1 52	6.0			519 73	3	27		100
1920	1,093 36	16,329	71	19	1 28	6.7			1,047 54	13,127	42	26	2 08	8.0			950 40	5	46		118
Tavistock—																					
1917	1,155 03		80					10	1,396 92		64						1,915 65	2			146
1918	1,258 12	13,089	114	10	92	9.6			1,014 49	11,047	58	16	1 46	9.2			10,303 82	3	284		175
1919	1,442 02	21,845	126	14	95	6.6			991 26	18,574	60	26	1 36	5.3			10,133 62	4	305		190
1920	1,806 64	31,384	139	19	1 08	5.7			1,015 70	21,082	64	29	1 32	4.6			8,593 94	4	298		207

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power							
	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers	
Year	\$	Kw-hrs.		kw-hr	\$ c.	cents	cents	\$	Kw-hrs.		kw-hr	\$ c.	cents	cents	\$	c.		\$	c.	
Tilsonburg—																				
1912	3,233 92	29,115	200	10	1 03	9.6	11+25	3,350 91	66,049	128	41	2 87	7.8	11+25	3,283 75	6				334
1913	2,796 57	45,937	254	14	1 02	7.3		4,677 38	70,265	143	38	2 52	6.5		4,763 15	17				414
1914	3,367 74	55,346	300	14	1 02	5.7		4,579 37	74,564	160	38	2 19	5.7		6,303 09	16				476
1915	3,203 51	72,975	348	14	1 02	5.5		4,236 42	95,326	161	38	2 14	4.7		5,619 15	15				524
1916	4,009 67	97,606	375	18	1 02	5.4		4,493 41	96,044	188	46	2 25	5.0		7,935 07	20	451	17 59		580
1917	5,237 69	77,751	400	21	1 13	5.8		4,758 14	104,830	165	45	2 70	5.1		16,717 31	22	532	31 42		585
1918	4,534 89	110,613	407	16	93	4.5		5,377 01	136,175	166	53	2 61	4.1		23,917 76	22	781	30 63		595
1919	4,971 07	159,319	441	21	94	4.0		5,573 12	151,422	178	64	2 84	4.0		18,378 45	19	753	24 41		641
1920	6,417 45		480	28	1 16			6,077 79		178	71									677
Toronto—																				
1912	201,554 74	4,220,270	11,441	25	1 25	4.4	8+25	* 233,799 04	6,156,073	*		4 09	3.8	12+25	225,451 55	518				11,959
1913	190,376 89	6,240,882	16,519	27	1 22	4.5		305,534 31	7,683,589	4,764	116	4 61	3.9		347,708 88	1,037				22,320
1914	289,645 45	8,599,559	23,181	27	1 04	3.9		291,907 92	10,243,496	6,276	126	3 60	2.8		483,681 15	1,494				30,951
1915	331,807 18	11,250,291	29,724	27	89	3.1		272,243 06	11,491,577	7,227	126	3 10	2.4		575,239 17	1,504				38,455
1916	335,181 19	15,341,150	34,347	29	89	2.7		297,459 72	12,763,343	7,406	131	2 96	2.3		612,918 32	1,707				43,460
1917	414,043 17	18,068,947	41,358	34	91	2.5		294,653 18	13,025,770	9,341	126	2 66	2.2		734,294 61	2,028	36,856	19 92		52,727
1918	451,824 59	22,799,666	42,558	36	89	2.5		382,167 17	17,197,460	9,113	117	2 66	2.2		907,886 95	2,034	46,159	19 66		53,705
1919	560,912 02	33,567,358	51,242	37	91	2.2		507,285 14	22,452,782	10,510	136	3 03	2.2		1,144,453 76	2,225	52,200	21 93		63,977
1920	729,364 33		57,685	51	1 11					11,307	171	3 87	2.2		1,158,639 12	2,390	57,000	20 33		71,382

STATEMENT "D"—Continued

Showing Comparative Revenue, Number of Consumers, Total Kw-hr. Consumption, Domestic and Commercial Light, Average Monthly Consumption per Consumer, Average Monthly Bill, and Net Cost per Kw-hr. for the Years 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1920 also Average Horse Power Sold and Average Cost per Horse Power per Year to Power Consumers.

Municipality	Domestic Light						Commercial Light						Power								
	Year	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost Prior to Hydro	Revenue	Consumption	Number of Consumers	Avg Monthly Consumption	Average Monthly Bill	Net Cost per Kw-hr.	Net Cost Prior to Hydro	Revenue	Number of Consumers	Average Horse Power	Average Cost per Horse Power	Total Number Consumers	
Waterdown—	1912	774 40		41					340 00		20						614 42				63
	1913	1,003 09		70					361 20		34						917 65				106
	1914	1,054 13	13,360	71	16	1 25	7.9	None	535 83	8,321	34	20	1 31	6.5			1,011 38				110
	1915	1,202 41	18,017	84	19	1 30	6.7		567 65	8,493	30	23	1 48	6.7		None	1,207 80				121
	1916	1,218 86	18,622	93	18	1 15	6.5		575 10	8,944	32	24	1 55	6.4			1,149 78				131
	1917	1,317 48	18,025	101	15	1 13	7.3		529 70	7,887	31	21	1 43	6.7			1,232 89	85	14 50		136
	1918	1,450 47	26,308	105	21	1 15	5.5		529 53	9,768	33	25	1 34	5.4			1,163 48	82	14 19		142
	1919	1,828 47	24,000	127	16	1 20	7.6		595 30		33						1,401 58	67	20 92		163
	1920	2,167 44	30,150	134	19	1 38	7.1		609 00	7,750	31	20	1 59	8.0			1,487 72	80	18 60		168
Waterford—	1915	685 22		75					546 08		40										115
	1916	1,112 28	14,220	99	14	1 08	7.8	10	796 50	9,827	42	20	1 62	8.1	10		1,007 74				143
	1917	1,369 35	17,445	100	15	1 14	7.8		807 28	11,938	42	24	1 21	6.8			4,030 85				143
	1918	1,501 34	19,613	122	13	1 03	7.7		831 42	13,075	46	25	1 51	6.4			3,687 15	85	43 38		170
	1919	1,874 15	37,321	149	21	1 05	5.0		1,003 75	20,737	47	37	1 78	4.8			3,921 69	105	37 34		199
	1920	2,503 53	39,489	171	21	1 30	6.0		977 72	25,277	50	44	1 70	3.9			3,345 94	105	31 60		226
Watford—	1918	1,544 91	20,173	108	16	1 20	7.6	Flat	1,324 56	18,173	70	21	1 57	7.2	10+25		1,542 04	64	24 09		182
	1919	1,905 65	23,042	118	16	1 34	8.3		1,779 86	16,293	60	23	2 47	10.9			2,154 95	63	34 20		183
	1920	2,332 72	26,686	136	18	1 53			2,160 32	20,679	70	27	2 76	10.5			2,305 80	80	29 00		213

Waterloo—	1912	4,057	46	239	21	1 27	6.1	12+25	4,524	93	87,718	112	62	3 58	5.8	12+25	11,545	93	35	386
	1913	4,263	66	321	19	1 05	5.5		5,098	42	98,924	125	59	2 90	5.		14,970	14	44	490
	1914	4,723	94	430	19	94	5.1		4,825	22	107,821	153	57	2 80	4.9		13,282	14	51	634
	1915	5,401	82	524	19	81	3.8		5,284	87	130,418	162	69	2 54	3.6		15,125	32	53	739
	1916	5,454	60	592	22	85	3.4		4,750	09	144,543	150	55	2 79	3.5		17,905	45	50	792
	1917	6,562	98	694	25	88	3.1		5,097	38	132,621	155	71	2 55	3.6		18,773	17	59	908
	1918	7,157	81	735	26	81	2.9		4,738	43	176,953	161	92	2 78	3.0		20,613	60	50	940
	1919	8,771	46	830	31	88	2.3		5,347	03	234,843	169	118	2 77	2.3		23,399	07	66	1,057
	1920	11,943	47	995	47	1 09	2.3		5,488	04							27,011	12	68	1,232
	Waubashene—	1915	516	34	49			7.0	None	220	50	2,979	15			7.7	None	32	28	1	65
	1916	646	58	58	13	1 01	7.9		496	47	7,534	20	36	2 37	6.6		49	52	1	79
	1917	691	56	64	11	94	8.0		455	62	8,588	17	40	2 23	5.3		36	85	1	82
	1918	702	19	64	13	91	6.9		494	76	10,988	16	57	2 58	4.5		21	49	1	81
	1919	735	40	66	14	93	6.7		266	34	4,951	17	24	1 31	5.4		41	10	2	85
	1920	1,050	26	71	17	1 28	7.5		478	46	7,344	18	28	249	6.4		70	49	1	94
Wellesley—	1917	642	52	68	9	79	9.0	None	353	33	3,393	28	10	1 05	10.4		2,784	78	3	99
	1918	677	43	65	10	87	8.4		415	73	7,198	25	24	1 38	5.8		4,351	11	3	93
	1919	747	84	69	12	90	7.7		524	60	12,542	27	39	1 62	4.2		4,253	22	3	99
	1920	857	83	76	12	98	7.6		524	94	11,270	30	31	1 45	4.7		4,180	31	3	109
Welland—	1913	1,369	67	408	22	82	3.7	8+25	558	46	64,449	53	100	2 64	2.6	8+25	4,307	21	18	479
	1914	4,411	20	492	27	81	3.0		1,676	38	69,340	53	105	2 42	2.3		8,305	71	23	568
	1915	4,643	16	467	26	79	3.1		1,600	79	94,582	57	141	2 40	1.7		38,541	88	23	547
	1916	4,800	06	536	26	82	3.1		1,580	48	156,083	75	155	2 02	1.3		78,184	81	24	635
	1917	5,584	56	593	36	83	2.3		2,034	85	218,721	94	170	2 02	1.1		96,449	82	23	710
	1918	7,662	93	767	38	93	2.4		2,593	74	329,736	120	190	2 11	1.1		93,972	63	28	
	1919	11,262	98	985	54	95	1.7		3,678	46	350,096	145	190	2 11	1.1		60,784	43	33	1,163
	1920	14,065	49	1092	72	1 12	1.6		5,126	13		172	183	269	1.4		55,825	21	34	1,298
West Lorne—	1917	578	98	54				Flat	602	00	7,917	40				Flat	59	38	1	94
	1918	759	87	66	9	96	11.0		649	68		44	15	1 23	8.2		360	44	1	111
	1919	991	90	66					873	46		44					4,838	27		111
	1920	1,286	61						1,253	45										
Wellington—	1920	1,737		125	11	1 15	10.1		1,362	42	17,012	43	33	2 61	8.0		1,503	26	3	
																				29 48

STATEMENT "E"

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year, Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
				\$ c.	\$ c.	\$ c.
Acton	1,563	{ 93 60	100-watt s 100 " m	{ 11 50 11 50 }	1,860 52	1 19
Ailsa Craig.....	486	52	100 " m	15 50	801 12	1 65
Alliston	1,264	{ 95 12	100 " s 100 " m	{ 18 00 18 00 }	1,888 02	1 49
Ancaster Twp.		54	100 " m	12 00	708 00	**
Arthur.....	1,172	68	100 " m	18 00	1,087 98	92
Aylmer.....	2,247	{ 136 12	100 " m 250 " m	{ 18 50 34 50 }	2,930 00	1 30
Ayr	802	78	100 " m	16 00	1,248 00	1 55
Baden		58	100 " m	11 00	638 00	**
Barrie.....	6,775	454	100 " m	8 00	4,068 80	60
Beachville		42	100 " m	12 00	504 00	**
Beaverton	949	76	100 " m	15 00	1,079 45	1 13
Beeton	571	62	100 " s	20 00	1,240 00	2 17
Blenheim	1,490	{ 13 133	300 " s 100 " s	{ 36 50 15 50 }	2,560 10	1 71
Bloomfield.....	600	35	100 " s	25 00	875 00	1 45
Bolton.....	587	59	100 " m	16 00	900 69	1 53
Bothwell	680	74	100 " m	15 50	1,146 96	1 68
Bradford	885	{ 55 12	100 " s 100 " m	{ 22 00 22 00 }	1,462 00	1 65
Brampton	4,270	583	100 " m	7 00	4,035 33	94
Brantford	32,159	{ 97 50 3,022 10 2	Mag. Arcs. s 750-watt s 100 " m 150 " m 500 " m	{ 30 00 6 00 7 00 }	23,557 89	73
Brantford Twp....		146	100 " m	15 00	2,131 25	**
Brechin		9	100 " m	20 00	149 25	**
Brigden		55	100 " m	20 00	1,043 75	**
Brockville	9,326	{ 50 36 2 486	50 lt. stn's. m 3 " m 1 " m 100 watt. s	{ 45 00 40 00 14 00 14 00 }	9,000 00	96
Burford		48	100 " m	16 00	752 00	**

** Population not recorded in Government statistics, hence no figures were used.

* Not a full year's operation.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year
Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
Burgessville .....	.....	21	100-watt m	\$ c. 19 00	\$ c. 361 00	\$ c. **
Caledonia	1,265	101	100 " m	11 00	1,092 96	86
Cannington	838	68	100 " m	16 00	1,011 99	1 20
Carleton Place ...	3,786	216	60 " m	6 00	1,306 50	34
Chatham	15,182	{ 672 2 6 83 31	{ 100 " s 400 " s 500 " s 400 " s 100 " s	{ 12 00 30 00 38 00 30 00 11 00	13,557 04	89
Chatsworth	303	{ 26 2	{ 150 " m 100 " m	{ 14 00 14 00	408 32	1 34
Chesley	1,741	98	150 " s	15 00	1,372 02	78
Chesterville	949	62	100 " m	18 00	1,116 00	1 17
Chippawa	1,172	72	100 " m	16 00	1,152 00	98
Clinton	1,809	{ 121 22 3 1	{ 75 " s 100 " m 100 " m 500 " m	{ 11 00 11 00 11 00 75 00	1,692 11	93
Coldwater	595	44	100 " m	14 00	580 00	97
Collingwood	7,262	399	100 " s	10 00	3,974 17	54
Comber .....	.....	50	100 " m	17 50	875 04	**
Cookstown ..	.....	56	100 " s	20 00	1,050 00	**
Creemore	612	55	100 " m	16 00	880 08	1 44
Dashwood .....	.....	41	100 " m	18 00	738 00	**
Delaware .....	.....	21	100 " m	18 00	378 00	**
Dorchester .....	.....	29	100 " m	17 00	493 00	**
Drayton	600	60	100 " s	18 00	1,080 00	1 80
Dresden	1,411	116	100 " s	14 00	1,682 00	1 19
Drumbo .....	.....	30	100 " m	16 00	480 00	**
Dublin .....	.....	35	100 " m	20 00	700 00	**
Dundalk	700	62	100 " m	14 00	800 06	1 14
Dundas	5,009	{ 310 2 5	{ 100 " m 100 " m	{ 9 00 12 00	2,930 91	58
Dunnville	3,517	{ 27 193	{ 400 " s 100 " s	{ 65 00 14 00	4,457 40	1 26

§ Township

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year' Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
				\$ c.	\$ c.	\$ c.
Durham	1,520	93	100-watt s	14 00	1,224 50	80
Dutton	860	95	100 " m	13 00	1,294 39	1 50
Elmira	2,392	161	100 " m	10 00	1,771 00	74
Elmvale .....	.....	54	100 " m	14 00	683 50	**
Elmwood .....	.....	23	150 " m	.....	569 25	**
Elora	1,205	86	100 " m	11 00	1,009 00	83
Embro	437	45	100 " m	19 00	845 76	1 93
Etobicoke Townp. ....	.....	{ 264 6	{ 100 " m 100 " m	{ 14 00 15 50 }	3,741 99	**
Exeter	1,445	{ 152 23	{ 100 " m 200 " m	{ 12 00 24 00 }	2,562 48	1 77
Fergus	1,710	135	100 " m	12 50	1,640 33	96
Flesherton.....	410	46	100 " m	14 00	594 00	1 45
Forest	1,422	{ 146 36 13	{ 60 " m 100 " m 100 " m	{ 13 50 18 00 20 00 }	2,852 56	2 00
Galt.....	12,434	{ 892 78 137 225	{ 75 " s 500 " m 300 " m 100 " m	{ 8 00 35 50 28 50 11 00 }	16,352 90	1 31
Georgetown	2,121	{ 154 33 1	{ 100 " m 100 " m 100 " m	{ 9 50 11 00 }	1,520 76	71
Glencoe	824	123	100 " m	25 00	768 75	*
Goderich	4,220	{ 290 16 8 8	{ 80-watt s 3lt. stds. m " m " m	{ 12 50 40 00 25 00 20 00 }	4,148 38	98
Grand Valley	582	52	100 " m	18 00	832 00	1 43
Granton .....	.....	32	100 " m	15 00	480 00	**
Gravenhurst	1,437	{ 99 24	{ 75 " s 100 " s	{ 10 00 10 00 }	1,199 18	83
Guelph	17,032	{ 7 4 739 247 92 1 2	{ 16 C.P m 60-watt m 100 " m 100 " m 200 " m 400 " m 1,000 " m	{ 4 25 4 00 7 50 8 50 12 50 25 00 46 50 }	9,145 47	53

** Population not recorded in Government statistics.

* Operation for less than a year.

§ Glenwilliams.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year, Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
Hagersville	1,072	100	100-watt m	\$ c. 9 00	\$ c. 941 70	\$ c. 88
		{ 7,491	100 " m	6 00	66,689 44	62
		669	200 " m	9 00		
		151	250 " m	9 50		
		408	500 " m	30 00		
Hamilton	108,143	{ 8	300 " m	15 00		
		26	40 " m	Special		
		8	60 " m	.....	
		246	100 " m	12 00		
		228	100 " m	6 00		
Hanover	2,724	{ 110	100 " s	18 00	2,010 50	73
		10	100 " m	18 00		
Harriston	1,340	62	100 " s	15 00	930 00	69
Hensall	721	65	100 " m	15 00	946 25	1 31
Hespeler	3,000	{ 133	100 " s	12 50	2,000 40	66
		23	200 " s	17 50		
Highgate	371	43	100 " m	16 50	709 50	1 91
Holstein	14	100 " m	20 00	231 50	**
Huntsville	2,160	{ 28	400 " s	30 00	1,887 00	87
		40	150 " s	15 00		
		12	60 " m	14 00		
		30	100 " m	15 00		
Ingersoll	5,385	{ 26	500 " s	35 00	4,086 57	76
		231	75 " s	10 00		
		80	60 " s	10 00		
Kirkfield	21	100 " m	26 50	278 40	*
Kingston	23,261	{ 247	Arc s	60 00	23,324 66	1 00
		95	watt s	75 00		
		73	100 " m	20 00		
Kitchener	21,056	{ 1,620	100 " s	8 50	14,617 99	69
		2	650 " s	36 00		
		15	500 " m	30 00		
		9	250 " m	17 35		
Lakefield	1,133	84	100 " m	24 00	607 00	*
Lambeth	30	100 " m	16 00	480 00	**
Listowel	2,551	{ 226	60 " m	12 00	3,464 00	1 35
		26	350 " m	30 00		
London	59,100	{ 2,460	100 " s	10 00	32,679 27	55
		219	250 " s	16 00		
		40	400 " s	20 00		
		105	500 " m	45 00		
		28	100 " m	Parks & Priv.		

§ Wentworth County.

§§ Barton Township.

** Population not recorded in Government statistics.

* Not a full year's operation.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year, Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
Lucan	620	68	100-watt m	\$ c. 14 00	\$ c. 928 68	\$ c. 1 49
Lynden		30	100 " m	15 00	472 50	**
Markdale.....	869	65	100 " s	12 00	739 37	85
Markham.....	836	91	100 " m	23 00	1,395 36	*
Midland	6,532	{ 19 329	{ 750 " s 100 " m	{ 40 00 12 00 }	4,401 00	67
Milton.....	1,800	183	100 " m	10 00	1,906 45	1 06
Milverton.....	1,044	{ 83 12	{ 100 " s 200 " s	{ 11 50 11 50 }	1,105 20	1 06
Mimico	2,887	{ 157 6	{ 100 " m 200 " m	{ 10 00 15 00 }	1,724 32	59
Mitchell	1,656	160	100 " s	12 00	1,920 00	1 16
Moorefield		23	100 " m	19 00	475 00	**
Mount Brydges...		38	100 " m	14 00	532 00	**
Mount Forest....	1,838	183	100 " s	12 00	1,953 00	1 06
Neustadt	430	39	100 " s	21 00	819 00	1 90
New Hamburg ...	1,370	212	100 " m	8 50	1,827 00	1 33
New Toronto.....	2,696	94	100 " m	11 00	956 88	35
Niagara-on-the-Lake	1,918	187	100 " m	5 00	2,393 75	1 24
Niagara Falls....	14,207	{ 101 16 670 16	{ 650 " s arcs 150-watt s 100 " s	{ 45 00 45 00 11 00 12 00 }	12,636 48	89
Norwich.....	1,271	{ 15 49 54	{ 400 " m 100 " m 60 " m	{ 42 00 10 50 9 00 }	1,641 00	1 29
Oil Springs.....	473	40	100 " m	18 50	740 04	1 56
Omemee	517	{ 33 10	{ 100 " s 250 " s	{ 16 00 36 00 }	893 74	1 72
Orangeville.....	2,186	{ 55 91	{ 150 " s 100 " s	{ 30 00 24 00 }	2,849 15	1 30
Ottawa	107,732	{ 59 717 107 500 2,870 387	{ arcs s 400-watt s 250 " s 75 " s 100 " m 100 " m	{ 45 00 45 00 45 00 10 00 2 48c. per ft. 6 00 }	60,396 13	56

** Operation for less than a year.

* Population not shown in Government statistics.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year, Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
				\$ c.	\$ c.	\$ c.
Otterville.....	.....	19	100-watt m	18 00	342 00	**
Owen Sound.....	12,218	{ 34	400 " s	26 00	11,018 09	90
		{ 8	150 " s	15 00		
		{ 63	200 " s	19 00		
		{ 478	100 " s	15 00		
		{ 43	200 " m	16 00		
		{ 79	100 " m	13 00		
Palmerston	1,890	{ 96	100 " s	15 00	1,631 25	86
		{ 20	150 " s			
Paris.....	4,320	{ 375	100 " s	11 00	4,642 00	1 07
		{ 35	100 " m	11 00		
		{ 6	200 " m	22 00		
Parkhill	1,213	83	100 " m	30 00	1,452 50	*
Penetang	3,811	173	75 " s	14 00	2,390 50	62
Perth.	4,047	{ 47	100 " s	22 00	1,064 30	.....
		{	250 " "	34 00		
		{	400 " "	46 00		
Peterboro'	21,230	{ 102	magnetite arcs	50 50	14,888 98	70
		{ 1,102	60-watt m	9 00		
Petrolia	2,863	{ 137	100 " s	15 50	3,442 83	1 20
		{ 24	250 " s	55 00		
Picton.....	3,165	{ 100	100 " s	16 00	3,936 00	1 24
		{ 171	80 " s	14 00		
Plattsville .....	.....	30	100 " m	17 00	576 00	**
Port Arthur	15,094	{ 2	500 " m	.....	14,349 00	95
		{ 100	250 " m			
		{ 14	200 " m			
		{ 1,769	100 " m			
		{ 768	60 " m			
Port Colborne....	3,235	1 80	100 " m	.....	1,200 00	**
Port Credit	878	110	100 " m	11 00	1,210 00	1 37
Port Dalhousie...	1,447	100	100 " m	10 00	1,064 00	73
Port McNicoll ...	531	38	100 " m	12 00	456 00	85
Port Stanley	717	{ 111	100 " m	13 00	1,677 00	||
		{ || 36	100 " m	6 50		
Prescott	2,774	{ 161	100 " m	12 00	4,137 00	1 49
		{ 210	100 " m	10 50		
Preston	5,184	{ 234	80 " s	11 00	3,290 23	63
		{ 48	100 " s	12 00		

** Population not recorded in Government statistics.
* Operation for less than a year.
|| Used only during summer season and cost per capita not fairly representative.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year
Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
Princeton		20	100-watt m	\$ c. 20 00	\$ c. 420 00	\$ c. **
Ridgetown	2,150	{ 132 17	100 " s 400 " s	15 00 } 32 00 }	2,511 46	1 16
Rockwood		{ 41 5	100 " m 60 " m	12 00 } 12 00 }	586 02	**
Rodney	686	76	100 " m	16 50	1,254 00	1 83
St. Catharines....	19,195	2,220	100 " m	6 50	14,441 58	75
St. George		33	100 " m	15 00	495 00	**
St. Jacob's		40	100 " m	14 00	560 00	**
St. Mary's	3,886	{ 113 199	250 " s 100 " s	20 00 } 11 00 }	4,449 00	1 14
St. Thomas	17,759	{ 1,057 113	75 " s 500 " s	9 50 } 37 50 }	14,238 54	80
Sarnia	12,649	{ 78 636	500 " s 100 " s	45 00 } 15 00 }	13,412 50	1 06
Scarboro' Twp. ...		{ 45 30 22	100 " s 100 " s 100 " m	16 00 } 18 00 } 18 00 }	1,656 50	**
Seaforth,	2,015	{ 60 70 14 2	100 " s 75 " s 75 " s 100 " m	12 00 } 10 00 } 12 00 } 12 00 }	1,718 47	85
Shelburne	1,063	91	100 " s	14 00	1,182 00	1 11
Simcoe	3,756	{ 27 230 2	250 " s 100 " s 100 " m	35 00 } 12 00 } 12 00 }	3,807 51	1 01
Smith's Falls....	6,665	{ 200 50	100 " m 200 " m	16 00 } 21 00 }	4,612 22	69
Springfield	420	40	100 " m	20 00	800 00	1 90
Stamford Twp ...		104	100 " m	8 00	1,236 89	**
Strathroy	2,637	{ 286 32	100 " s 250 " s	11 00 } 20 00 }	4,257 20	1 61
Stratford	18,106	{ 770 11 5 173	100 " s 500 " s 500 " s 500 " s	9 50 } 45 00 } 35 00 } 40 00 }	15,141 31	83
Sebringville		15	100 " m	12 00	176 00	**

** Population not given in Government statistics.

STATEMENT "E"—Continued

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year,
Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
				\$ c.	\$	
Stayner	915	{ 22 50	60-watt s 100 " s	{ 14 00 14 00 }	1,008 00	1 10
Sunderland		27	100 " m	18 00	380 25	**
Tara	520	65	100 " m	20 00	1,272 00	2 44
Tavistock	876	{ 86 9	100 " m 200 " m	{ 13 00 26 00 }	1,370 04	1 56
Thamesford		34	100 " m	17 00	578 00	**
Thamesville	804	75	100 " m	17 00	1,200 00	1 49
Thorndale		27	100 " m	17 00	442 00	**
Thornton		13	100 " m	.....	448 54	**
Tilbury	1,619	61	100 " m	15 00	915 00	56
Tillsonburg	2,856	241	80 " s	11 00	2,651 00	93
Tottenham	469	48	100 " m	21 00	1,029 00	2 19
		{ 4 6 41,841 91 7 161 709 35 4 452	{ 50 " m 60 " m 100 " m 150 " m 200 " m 250 " m 300 " m 500 " m 1,000 " m 5 lt. stds. m	{ 6 00 4 80 8 00-10 20 12 00-13 80 16 00-18 00 22 00-23 00 25 00 45 00-52 50 90 00 47 50 }	335,369 74	67
Toronto	499,278					
Vaughan Twp.		14	100-watt m	17 00	238 00	**
Victoria Harbor ..	1,441	60	100 " m	11 00	610 00	42
Walkerville	9,741	{ 757 113 20	{ 60 " m 100 " m 60 " m	{ 5 60 12 00 12 00 }	3,692 33	38
Wallaceburg	4,067	{ 172 28	{ 60 " s 250 " s	{ 13 50 30 00 }	3,567 12	88
Waterdown	791	60	100 " m	10 00	600 00	76
Waterford	1,084	98	100 " m	12 00	1,177 00	1 08
		{ 44 8 38 14 157 241	{ 5 lt. stds. m 3 " m 100-watt m 200 " m 100 " s 80 " s	{ 40 00 25 00 8 75 10 50 8 75 8 75 }	5,697 47	1 04
Waterloo	5,476					
Watford	1,033	{ 85 1	{ 100 " m 60 " m	{ 18 50 13 68 }	1,592 94	1 54

** Population not given in Government statistics.

STATEMENT "E"—Concluded

Street Light Installation in Hydro Municipalities, December 31st, 1920, showing Cost per Year, Cost per Lamp, and Cost per Capita.

Municipality	Population	Number of Lamps	Size and Style of Lamps	Cost per Lamp	Total Cost	Cost per Capita
				\$ c.	\$ c.	\$ c.
Waubauskene		30	100-watt m	12 00 18 00	360 00	**
Welland	9,135	{ 102 357 †† 20 9	250 " m 100 " m 100 " m 100 " m	9 00 11 00 11 00	5,798 50	63
Wellesley		53	100 " m	14 00	732 74	**
Wellington	853	62	100 " s	14 00	868 00	1 01
West Lorne	787	85	100 " m	16 50	1,402 50	1 78
Weston	2,570	{ 228 5 * 26 7	75 " s 75 " s 100-watt s 5 lt. stds.	10 00 8 00 10 00 35 00	2,680 00	1 04
Winchester	1,019	117	100-watt m	15 00	1,590 42	1 56
Windsor	35,272	{ 2,032 23 282	100 " s 250 " s 500 " s	12 00 24 00 50 00	39,564 86	1 12
Williamsburg		17	100 " m	13 00	221 00	**
Woodbridge	587	78	100 " m	11 00	887 00	1 51
Woodstock	10,126	{ 50 223 375	250 " s 100 " s 100 " m	22 00 8 50 8 50	7,241 75	71
Woodville	434	36	100 " m	18 00	556 25	1 28
Wyoming	503	48	100 " m	20 00	960 00	1 91
Zurich		60	100 " m	18 00	1,080 00	**

*York Township

††Port Robinson

STATEMENT “ F ”

Cost of Power to Municipalities and Power Rates
to Consumers

STATEMENT

Cost of Power to Municipalities and

Municipality	Note	Interim Rates at which Power is billed to the Municipality and adjusted to Cost at the end of the year									
		1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Acton	D	.....	36 00	36 00	36 00	36 00	36 00	36 00	35 00	32 00	32 00
Ailsa Craig	D	.....	.....	.....	.....	49 67	49 67	49 67	49 00	49 00	49 00
Alliston	D	.....	.....	.....	.....	.....	.....	40 00	40 00	50 00	60 00
Ancaster	D	.....	.....	.....	.....	.....	.....	.....	25 81	25 81	25 81
Arthur	D	.....	.....	.....	.....	.....	45 00	45 00	45 00	65 00	85 00
Aylmer	D	.....	.....	.....	.....	.....	.....	39 00	38 00	38 00	45 00
Ayr	D	.....	.....	.....	37 40	37 40	37 40	37 40	45 00	50 00	50 00
Baden	D	36 95	37 00	32 00	32 00	32 00	32 00	32 00	32 00	32 00	32 00
Barrie	D	.....	33 70	33 70	33 70	33 70	31 00	31 00	29 00	29 00	29 00
Barton Township	D	.....	Served by Hamilton				.....	.....	.....	.....	.....
Beachville	D	33 89	31 00	31 00	31 00	31 00	28 00	28 00	27 00	27 00	30 00
Beaverton	D	.....	.....	.....	6 17	59 00	41 21	41 21	45 00	55 00	60 00
Beeton	D	.....	.....	.....	.....	.....	.....	45 00	45 00	85 00	85 00
Blenheim	D	.....	.....	.....	.....	43 70	43 70	43 70	50 00	50 00	53 00
Bloomfield	D	.....	.....	.....	.....	.....	.....	.....	66 16	66 16	66 16
Bolton	D	.....	.....	.....	43 00	43 00	43 00	43 00	43 00	60 00	60 00
Bothwell	D	.....	.....	.....	.....	59 26	59 26	59 26	60 00	60 00	60 00
Bradford .....	.....	.....	.....	.....	.....	.....	.....	47 00	47 00	75 00	75 00
Brampton	B	29 00	25 00	25 00	25 00	24 00	22 00	22 00	22 00	20 00	20 00
Brantford	A	.....	.....	19 50	19 50	19 00	19 00	19 00	18 00	18 00	20 00
Brechin	D	.....	.....	.....	56 79	67 00	50 00	50 00	55 00	85 00	90 00
Bridgeport, ext. ....	.....	.....	.....	Served by Kitchener				.....	.....	.....	.....
Brantford Township ..	D	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Breslau	D	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brooklyn .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brockville .....	.....	.....	.....	.....	.....	.....	.....	30 00	40 00	45 19	55 00
Brigden	D	.....	.....	.....	.....	.....	.....	57 56	57 50	57 50	60 00
Bullock's Corners and Greensville, ext. ....	.....	.....	.....	Served by Dundas				.....	.....	.....	.....
Burford	D	.....	.....	.....	37 50	37 50	37 50	37 50	60 00	70 00	70 00
Burgessville	D	.....	.....	.....	.....	.....	48 38	48 38	48 00	48 00	48 00
Carleton Place	D	.....	.....	.....	.....	.....	.....	.....	33 00	33 00	44 00
Caledonia	D	29 10	29 10	24 00	24 00	24 00	24 00	24 00	24 00	24 00	24 00
Cannington	D	.....	.....	.....	65 77	63 00	45 79	45 79	50 00	65 00	65 00
Chatham	A	.....	.....	.....	30 78	30 78	30 78	30 78	29 00	29 00	28 00
Chatsworth	D	.....	.....	.....	.....	30 18	30 18	30 18	30 00	45 00	60 00
Chesley	D	.....	.....	.....	.....	40 00	40 00	40 00	40 00	45 00	55 00
Chippawa	D	.....	.....	.....	.....	.....	.....	.....	35 00	35 00	35 00
Chesterville	D	.....	.....	36 12	43 29	46 00	46 00	46 00	46 00	76 73	85 00
Clinton	A	.....	.....	39 00	39 00	42 00	42 00	42 00	43 00	43 00	46 00
Coldwater	D	.....	28 00	28 00	28 00	28 00	28 00	28 00	40 00	50 00	60 00
Collingwood	D	.....	33 79	33 79	33 79	33 97	30 00	30 00	28 00	28 00	36 00
Comber	D	.....	.....	.....	.....	56 22	56 22	56 22	60 00	60 00	70 00
Cookstown	D	.....	.....	.....	.....	.....	.....	35 00	35 00	60 00	60 00
Creemore	D	.....	.....	54 13	54 13	54 13	54 13	54 13	60 00	65 00	65 00
Dashwood	D	.....	.....	.....	.....	.....	.....	56 75	56 00	56 00	56 00
Delaware	D	.....	.....	.....	46 56	46 56	46 56	46 56	50 00	85 00	85 00
Dorchester	D	.....	.....	.....	45 00	45 00	45 00	45 00	50 00	50 00	50 00
Drayton	D	.....	.....	.....	.....	.....	.....	60 45	60 00	65 00	70 00
Dresden	D	.....	.....	.....	43 00	43 00	43 00	43 00	42 00	38 00	38 00
Drumbo	D	.....	.....	.....	40 73	40 73	40 73	40 73	45 00	60 00	55 00

“F”

Power Rates to Consumers

Power Rates to Consumers									
1920					Suggested, 1921				
Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount	Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount
\$ c.	c.	c.	c.	%	\$ c.	c.	c.	c.	%
1 00	3.1	2.1	0.15	10	1 00	3.1	2.1	0.15	10
1 00	5.2	3.5	0.15	10	1 00	5.2	3.5	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	3.	2.	0.15	10	1 00	3.	2.	0.15	10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	3.1	2.0	0.15	10	1 00	2.8	1.8	0.15	10
1 00	2.8	1.8	0.15	10	1 00	2.2	1.5	0.15	10
Hamilton rates plus 10%					Hamilton rates plus 10%				
1 00	2.0	1.4	0.15	10	1 00	2.11	1.39	0.167	10 & 10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	6.5	4.3	0.15	10	1 00	6.5	4.3	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	7.1	4.7	0.15	10	1 00	7.1	4.7	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	1.67	1.11	0.133	10&10	1 00	1.67	1.11	0.133	10&10
1 00	2.133	1.33	0.173	25&10	1 00	2.133	1.33	0.173	25 & 10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	2.8	1.8	0.15	10	1 00	2.8	1.8	0.15	10
1 00	2.3	1.6	0.15	10	1 00	2.3	1.6	0.15	10
1 00	3.9	2.6	0.15	10	Rural Rate				
1 00	4.5	3.0	0.15	10	1 00	4.5	3.0	0.15	10
1 00	4.5	3.	0.15	10	1 00	5.2	3.5	0.15	10
1 00	6.8	4.5	0.15	10	1 00	6.8	4.5	0.15	10
1 00	2.8	1.8	0.15	10	1 00	2.8	1.8	0.15	10
1 00	6.8	4.5	0.15	10	1 00	6.8	4.5	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	2.0	1.4	0.15	10	1 00	2.33	1.56	0.167	10&10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	3.2	2.1	0.15	10	1 00	2.5	1.7	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	5.1	3.4	0.15	10	1 00	5.1	3.4	0.15	10
1 00	3.6	2.4	0.15	10	1 00	2.8	1.8	0.15	10
1 00	5.2	3.5	0.15	10	1 00	5.2	3.5	0.15	10
1 00	4.7	3.1	0.15	10	1 00	4.7	3.1	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	1.83	1.233	0.15	10&10	1 00	2.5	1.7	0.2	10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	6.4	4.3	0.15	10	1 00	6.4	4.3	0.15	10
1 00	6.7	4.5	0.15	10	1 00	6.7	4.5	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	7.1	4.7	0.15	10	1 00	7.1	4.7	0.15	10
1 00	4.2	2.8	0.15	10	1 00	3.9	2.6	0.15	10
1 00	4.8	3.2	0.15	10	1 00	4.8	3.2	0.15	10

STATEMENT

Cost of Power to Municipalities and

Interim rates at which power is billed to the Municipality and adjusted to cost at the end of the year

Municipality	Note	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Dublin	D	.....	.....	.....	.....	.....	47 91	47 91	48 00	60 00	60 00
Dundalk	D	.....	.....	.....	.....	27 30	27 30	27 30	27 00	38 00	50 00
Dundas	B	17 00	16 00	15 00	15 00	14 00	14 00	14 00	14 00	14 00	17 00
Dunnville	A	.....	.....	.....	.....	.....	.....	27 77	27 77	35 00	40 00
Durham	D	.....	.....	.....	.....	33 97	33 97	33 97	33 00	45 00	50 00
Dutton	D	.....	.....	.....	43 53	43 53	43 53	43 53	43 00	40 00	40 00
Elmira	D	.....	38 00	38 00	38 00	38 00	38 00	38 00	38 00	38 00	38 00
Elmvale	D	.....	31 00	31 00	31 00	31 00	31 00	31 00	31 00	37 00	37 00
Elmwood	D	.....	.....	.....	.....	.....	.....	35 00	35 00	45 00	55 00
Elora.....	D	.....	.....	33 97	33 97	33 97	33 97	33 97	40 00	40 00	40 00
Embro.....	D	.....	.....	.....	39 85	45 00	45 00	45 00	60 00	75 00	75 00
Etobicoke Township..	D	.....	.....	.....	.....	.....	27 00	27 00	27 00	27 00	27 00
Exeter	D	.....	.....	.....	.....	41 66	41 66	41 66	41 00	41 00	41 00
Fergus	D	.....	.....	33 97	33 97	33 97	33 97	33 97	40 00	40 00	44 00
Flesherton.....	D	.....	.....	.....	.....	25 96	25 96	25 96	26 00	36 00	45 00
Ford City.....	.....	.....	.....	Served by Walkerville				63 27	63 27	63 00	63 00
Forest.....	D	.....	.....	.....	.....	.....	.....	63 27	63 00	60 00	63 00
Galt.....	C	25 00	22 00	21 50	21 50	21 00	20 00	20 00	20 00	20 00	21 00
Georgetown.....	D	.....	36 00	36 00	36 00	36 00	36 00	36 00	36 00	35 00	35 00
Glen Williams, ext....	.....	.....	.....	Served by Georgetown				.....	.....	.....	.....
Goderich....	A	.....	.....	37 00	37 00	43 00	43 00	43 00	43 00	43 00	50 00
Grand Valley	D	.....	.....	.....	.....	.....	45 00	45 00	45 00	60 00	70 00
Glencoe	D	.....	.....	.....	.....	.....	.....	.....	.....	78 35	78 35
Gravenhurst	C	.....	.....	.....	.....	.....	.....	.....	.....	15 00	15 00
Gamebridge.....	.....	.....	.....	Served by Brechin				.....	.....	.....	.....
Granton	D	.....	.....	.....	.....	48 61	48 61	48 61	48 00	55 00	55 00
Guelph	B	25 00	22 00	21 00	21 00	20 00	20 00	20 00	19 00	19 00	20 00
Hagersville	D	.....	33 21	33 21	33 21	33 21	33 21	33 21	34 00	36 00	36 00
Hamilton	B	17 00	16 00	15 00	15 00	14 00	14 00	14 00	14 00	14 00	16 00
Hanover.....	D	.....	.....	.....	.....	.....	.....	35 00	35 00	35 00	40 00
Harriston.....	D	.....	.....	.....	.....	46 62	46 62	46 62	48 00	52 00	55 00
Hensall.....	D	.....	.....	.....	.....	.....	47 76	47 67	47 00	55 00	57 00
Hespeler.....	C	26 00	23 00	23 00	23 00	22 50	21 00	21 00	21 00	21 00	23 00
Highgate	D	.....	.....	.....	.....	.....	51 82	51 82	51 00	51 00	55 00
Holstein.....	D	.....	.....	.....	.....	43 50	43 50	43 50	44 00	75 00	90 00
Horning's Mills .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huntsville.....	D	.....	.....	.....	.....	.....	22 51	22 51	25 00	25 00	25 00
Ingersoll	B	28 00	25 50	25 50	25 50	25 00	23 00	23 00	23 00	21 00	23 00
Kingston	A	.....	.....	.....	.....	.....	.....	28 00	.....	25 00	25 00
Kirkfield .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45 00	60 00
Kitchener.....	B	25 00	22 50	21 50	21 50	21 00	20 00	20 00	19 00	19 00	20 00
Lakefield .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36 00	36 00
Lambeth.....	D	.....	.....	.....	46 56	46 56	46 56	46 56	50 00	85 00	75 00
Listowel.....	D	.....	.....	.....	.....	37 41	37 41	37 41	37 00	37 00	37 00
London	B	28 00	24 00	23 00	23 00	22 00	21 00	21 00	19 00	19 00	20 00
Lucan	D	.....	.....	.....	47 74	47 74	47 74	47 74	40 00	40 00	35 00
Lynden	D	.....	.....	.....	33 00	33 00	33 00	33 00	40 00	50 00	50 00
Markdale.....	D	.....	.....	.....	.....	23 24	23 24	23 24	23 00	35 00	50 00
Markham.....	D	.....	.....	.....	.....	.....	.....	.....	.....	77 74	77 74
Midland	D	21 00	20 30	19 45	19 37	19 37	19 00	19 00	20 00	28 00	32 00

“F”—Continued

Power Rates to Consumers

Power Rates to Consumers									
1920					Suggested, 1921				
Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount	Service Charge per Hp. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount
\$ c.	c.	c.	c.	%	\$ c.	c.	c.	c.	%
1 00	6.4	4.3	0.15	10	1 00	6.4	4.3	0.15	10
1 00	4.2	2.8	0.15	10	1 00	4.2	2.8	0.15	10
1 00	1.67	1.11	0.15	10 & 10	1 00	1.67	1.11	0.15	10 & 10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	4.5	3.0	0.15	10	1 00	4.5	3.0	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	3.2	2.1	0.15	10	1 00	3.2	2.1	0.15	10
1 00	7.1	4.7	0.15	10	1 00	7.1	4.7	0.15	10
1 00	3.2	2.1	0.15	10	1 00	3.2	2.1	0.15	10
1 00	3.9	2.6	0.15	10	1 00	3.9	2.6	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	4.2	2.8	0.15	10	1 00	4.2	2.8	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	7.4	4.9	0.15	10	1 00	7.1	4.7	0.15	10
1 00	2.	1.33	0.167	25 & 10	1 00	2.	1.33	0.167	25 & 10
1 00	2.8	1.8	0.15	10	1 00	2.0	1.4	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	4.5	3.	0.15	10	1 00	4.5	3.	0.15	10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	8.6	5.7	0.15	10	1 00	8.6	5.7	0.15	10
1 00	3.5	2.25	0.15	10	1 00	3.5	2.25	0.15	10
1 00	8.7	5.8	0.15	10	1 00	8.7	5.8	0.15	10
1 00	5.6	3.8	0.15	10	1 00	5.6	3.8	0.15	10
1 00	1.467	1.	0.133	25 & 10	1 00	1.467	1.	0.133	25 & 10
1 00	2.8	1.8	0.15	10	1 00	2.5	1.7	0.15	10
1 00	1.43	1.	0.143	30 & 10	1 00	2.5	1.7	0.21	50 & 10
1 00	3.3	2.2	0.15	10	1 00	3.3	2.2	0.15	10
1 00	4.8	3.2	0.15	10	1 00	4.8	3.2	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	2.11	1.39	0.167	10 & 10	1 00	2.11	1.39	0.167	10 & 10
1 00	5.8	3.9	0.15	10	1 00	5.8	3.9	0.15	10
1 00	9.3	6.2	0.15	10	1 00	9.3	6.2	0.15	10
1 00	5.6	3.8	0.15	10	1 00	5.6	3.8	0.15	10
1 00	3.5	2.25	0.15	10	1 00	3.5	2.25	0.15	10
1 00	1.67	1.11	0.133	10 & 10	1 00	1.67	1.11	0.133	10 & 10
1 00	2.5	1.7	0.15	10	1 00	2.	1.4	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	1.867	1.267	0.16	25 & 10	1 00	1.867	1.267	0.16	25 & 10
1 00	4.2	2.8	0.15	10	1 00	4.2	2.8	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	3.8	2.5	0.15	10	1 00	3.8	2.5	0.15	10
1 00	1.867	1.267	0.16	25 & 10	1 00	1.867	1.267	0.16	25 & 10
1 00	4.2	2.8	0.15	10	1 00	4.2	2.8	0.15	10
1 00	4.5	3.0	0.15	10	1 00	4.5	3.0	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	10.0	6.7	0.15	10	1 00	9.3	6.2	0.15	10
1 00	2.0	1.4	0.15	10	1 00	2.0	1.4	0.15	10

STATEMENT

Cost of Power to Municipalities and

		Interim rates at which power is billed to the Municipality and adjusted to cost at the end of the year.									
Municipality	Note	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Milton.....	B	.....	28 00	28 00	28 00	28 00	28 00	28 00	28 00	28 00	28 00
Milverton....	D	.....	.....	.....	.....	35 63	35 63	35 63	35 00	35 00	35 00
Mimico.....	D	30 74	30 00	28 00	28 00	28 00	27 00	27 00	25 00	21 00	21 00
Mitchell.....	A	38 00	37 00	37 00	37 00	37 00	36 00	36 00	36 00	36 00	36 00
Moorefield	D	.....	.....	.....	.....	.....	.....	63 93	63 00	70 00	70 00
Mount Brydges	D	.....	.....	.....	46 56	46 56	46 56	46 56	50 00	70 00	70 00
Mount Forest	D	.....	.....	.....	.....	34 51	34 51	34 51	40 00	55 00	65 00
New Hamburg	D	32 00	32 00	32 00	32 00	32 00	32 00	32 00	32 00	32 00	32 00
New Toronto.....	D	.....	.....	28 00	28 00	28 00	27 00	27 00	25 00	20 00	22 00
Newbury	D	.....	.....	.....	.....	.....	.....	.....	.....	.....	67 10
Neustadt.....	D	.....	.....	.....	.....	.....	.....	.....	42 50	45 00	55 00
Niagara-on-the Lake..	B	.....	.....	.....	.....	.....	.....	.....	.....	28 00	28 00
Niagara Falls.....	B & D	.....	.....	.....	.....	11 50	11 50	11 50	11 50	11 50	12 50
Norwich.....	D	30 00	32 00	32 00	32 00	38 00	38 00	38 00	35 00	35 00	35 00
Oil Springs	D	.....	.....	.....	.....	.....	.....	38 54	38 00	43 00	43 00
Omeme	D	.....	.....	.....	.....	.....	.....	39 39	39 39	39 39	39 39
Orangeville	D	.....	.....	.....	.....	35 00	35 00	35 00	35 00	55 00	65 00
Ottawa.....	A	15 00	15 00	15 00	14 00	14 00	14 00	14 00	14 00	14 00	13 50
Otterville.....	D	.....	.....	.....	.....	45 00	45 00	45 00	50 00	50 00	50 00
Owen Sound	D	.....	.....	.....	.....	31 00	31 00	31 00	28 00	28 00	30 00
Palmerston.....	D	.....	.....	.....	.....	40 82	40 82	40 82	45 00	50 00	45 00
Paris.....	A	.....	.....	21 00	21 00	21 00	21 00	21 00	20 00	19 00	21 00
Parkhill.....	D	.....	.....	.....	.....	.....	.....	.....	.....	75 23	75 00
Perth	D	.....	.....	.....	.....	.....	.....	.....	32 00	32 00	45 00
Penetang.....	D	28 80	26 50	26 50	26 50	26 50	22 00	22 00	22 00	32 00	30 00
Peterboro.....	C & D	.....	.....	18 00	18 00	17 70	17 70	17 50	17 50	17 50	17 50
Petersburg .....	.....	.....	.....	Served from		Baden	Sub-S	tation	.....	.....	.....
Petrolia	D	.....	.....	.....	.....	36 26	36 26	36 26	36 00	36 00	36 00
Plattsville.....	D	.....	.....	.....	49 27	49 27	49 27	49 27	60 00	65 00	65 00
Picton.....	D	.....	.....	.....	.....	.....	.....	.....	69 14	69 14	69 14
Port Colborne.....	A	.....	.....	.....	.....	.....	.....	.....	.....	21 00	21 00
Port Arthur	A	20 30	19 50	22 25	22 71	20 75	20 75	19 75	19 75	.....	.....
Port Credit	D	36 79	31 00	28 00	28 00	27 00	27 00	27 00	25 00	23 00	23 00
Port Dalhousie.....	D	.....	22 30	21 42	22 49	24 31	25 81	24 85	21 56	17 00	17 00
Port McNicoll.....	D	.....	.....	.....	35 00	35 00	25 00	25 00	35 00	85 00	85 00
Port Robinson, ext....	.....	Served by Welland									
Port Stanley.....	D	59 75	55 50	43 85	50 90	49 53	46 78	45 54	53 03	53 00	50 00
Prescott	D	.....	.....	39 59	28 67	25 00	25 00	25 00	.....	44 93	55 00
Preston	C	25 00	21 50	21 00	21 00	20 00	19 00	19 00	19 00	19 00	22 00
Princeton.....	D	.....	.....	.....	65 95	65 95	65 95	65 95	70 00	85 00	90 00
Ridgetown.....	D	.....	.....	.....	.....	47 17	47 17	47 17	47 00	47 00	45 00
Rockwood	D	.....	38 00	38 00	38 00	38 00	38 00	38 00	38 00	55 00	55 00
Rodney	D	.....	.....	.....	.....	.....	63 00	63 00	63 00	63 00	55 00
Sandwich.....	.....	Served by Windsor									
Sarnia.....	A	.....	.....	.....	.....	38 00	38 00	38 00	38 00	36 00	35 00
Seaforth.....	A	41 00	40 00	40 00	40 00	40 00	38 00	38 00	38 00	36 00	36 00
Scarboro Township...	D	.....	.....	.....	.....	.....	.....	.....	25 00	25 00	28 00
Sebringville, ext....	.....	Served by Stratford									
Shelburne	D	30 00	30 00	30 00	30 00	38 00	50 00
Simcoe	A	35 00	35 00	35 00	35 00	32 00	28 00	28 00

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"F"—Continued

Power Rates to Consumers

Power Rates to Consumers

1920					Suggested, 1921				
Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount	Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount
\$ c.	c.	c.	c.	%	\$ c.	c.	c.	c.	%
1 00	2.2	1.5	0.15	10	1 00	2.2	1.5	0.15	10
1 00	3.3	2.2	0.15	10	1 00	3.3	2.2	0.15	10
1 00	2.11	1.39	0.67	10&10	1 00	2.11	1.39	0.167	10&10
1 00	3.8	2.5	0.15	10	1 00	3.6	2.4	0.15	10
1 00	7.1	4.7	0.15	10	1 00	7.1	4.7	0.15	10
1 00	5.4	3.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	3.8	2.5	0.3	10	1 00	4.2	2.8	0.15	10
1 00	2.9	1.9	0.15	10	1 00	2.9	1.9	0.15	10
1 00	2.133	1.33	0.173	25&10	1 00	2.133	1.33	0.173	25&10
1 00	8.1	5.4	0.15	10	1 00	8.1	5.4	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	2.8	1.8	0.15	10	1 00	2.5	1.7	0.15	10
1 00	2.2	1.5	0.18	50&10	1 00	1.33	0.867	0.1	25&1
1 00	3	2	0.15	10	1 00	3	2	0.15	10
1 00	4.8	3.2	0.15	10	1 00	4.8	3.2	0.15	10
1 00	4.5	3	0.15	10	1 00	4.5	3	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	1.8	1.2	0.15	15&10	1 00	1.8	1.2	0.15	15&10
1 00	4.9	3.3	0.15	10	1 00	4.7	3.1	0.15	10
1 00	2	1.4	0.15	10	1 00	2	1.4	0.15	10
1 00	4.7	3.1	0.15	10	1 00	4.7	3.1	0.15	10
1 00	1.67	1.11	0.133	10&10	1 00	1.67	1.11	0.133	10&10
1 00	9.0	6.0	0.15	10	1 00	7.8	5.2	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	2.0	1.4	0.15	10	1 00	2.0	1.4	0.15	10
1 00	1.3	0.8	0.1	10	1 00	1.3	0.8	0.1	10
1 00	5.1	3.4	0.15	10	1 00	5.4	3.6	0.15	10
1 00	3.6	2.4	0.15	10	1 00	6.4	4.3	0.15	10
1 00	5.4	3.6	0.15	10	1 00	3.1	2.0	0.15	10
1 00	6.8	4.5	0.15	10	1 00	5.4	3.6	0.15	10
1 00	2.5	1.7	0.15	10	1 00	6.4	4.3	0.15	10
1 00	1.75	1	0.1	10	1 00	2.33	1.56	0.167	10&10
1 00	2.0	1.4	0.15	10	1 00	1.75	1	0.1	10
1 00	2.33	1.56	0.167	10&10	1 00	2.0	1.4	0.15	10
1 00	3.6	2.4	0.15	10	1 00	2.33	1.56	0.167	10&10
1 00	1.8	1.2	0.15	10	1 00	6.8	4.6	0.15	10
1 00	5	3	0.15	10	1 00	1.8	1.2	0.15	10
1 00	2.8	1.8	0.2	10	1 00	5	3	0.15	10
1 00	1.67	1.11	0.133	10&10	1 00	4.2	2.8	0.15	10
1 00	7.8	5.2	0.15	10	1 00	1.67	1.11	0.133	10&10
1 00	4.8	3.2	0.15	10	1 00	7.8	5.2	0.15	10
1 00	4.9	3.3	0.15	10	1 00	4.5	3.0	0.15	10
1 00	6.7	4.5	0.15	10	1 00	4.9	3.3	0.15	10
1 00	3.5	2.3	0.15	10	1 00	5.6	3.8	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	3.6	2.4	0.15	10	1 00	3.1	2.0	0.15	10
1 00	4.9	3.3	0.15	10	1 00	3.5	2.3	0.15	10
1 00	4.5	3	0.15	10	1 00	4.9	3.3	0.15	10
1 00	3.5	2.3	0.15	10	1 00	4.5	3	0.15	10
1 00	2.8	1.8	0.15	10	1 00	3.5	2.3	0.15	10
1 00					1 00	2.5	1.7	0.15	10

STATEMENT
Cost of Power to Municipalities and

Municipality	Note	Interim rates at which power is billed to the Municipality and adjusted to cost at the end of the year									
		1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
		\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Smith's Falls	D	.....	.....	.....	.....	.....	.....	28 00	28 00	28 00	40 00
Springfield	D	.....	.....	.....	.....	.....	65 00	65 00	65 00	65 00	65 00
St. Agatha				See Petersburg							
St. Catharines.....	B	.....	.....	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00
St. George	D	.....	.....	.....	38 78	38 78	38 78	38 78	45 00	45 00	45 00
St. Jacob's.....	D	.....	.....	.....	.....	.....	32 44	42 18	32 00	32 00	35 00
St. Mary's	B	38 00	29 50	29 50	29 50	28 00	28 00	28 00	28 00	28 00	32 00
St. Thomas	B	32 00	29 00	28 00	28 00	27 00	26 00	26 00	24 00	24 00	25 00
Stamford Township ..	B	.....	.....	.....	.....	.....	.....	16 57	15 00	15 00	16 00
Stayner	D	.....	.....	37 82	37 82	37 82	35 00	35 00	35 00	40 00	40 00
Stratford.....	A	32 00	30 00	30 00	30 00	29 00	27 00	27 00	25 00	25 00	27 00
Strathroy.....	B	.....	.....	.....	44 07	44 07	44 07	44 01	42 00	40 00	37 00
Sunderland	D	.....	.....	.....	82 68	81 00	50 00	50 00	55 00	85 00	85 00
Tara	D	.....	.....	.....	.....	.....	.....	37 00	37 00	85 00	90 00
Tavistock	D	.....	.....	.....	.....	.....	78 28	37 01	36 00	35 00	35 00
Thamesford	D	.....	.....	45 00	45 00	45 00	45 00	45 00	50 00	55 00	50 00
Thamesville	D	.....	.....	.....	.....	45 40	45 40	45 40	50 00	60 00	55 00
Thorndale	D	.....	.....	45 00	45 00	45 00	45 00	45 00	50 00	60 00	60 00
Thorn on	D	.....	.....	.....	.....	.....	.....	43 00	43 00	85 00	85 00
Tilbury.....	D	.....	.....	.....	39 45	39 45	39 45	39 45	45 00	50 00	50 00
Tillsonburg	B	32 00	32 00	32 00	32 00	35 00	35 00	35 00	32 00	30 00	30 00
Toronto	B	18 50	15 00	15 00	15 00	14 50	14 50	14 50	14 50	14 50	17 00
Toronto Township....	D	.....	.....	.....	.....	.....	.....	.....	25 00	25 00	25 00
Tottenham	D	.....	.....	.....	.....	.....	.....	51 00	51 00	85 00	90 00
Victoria Harbor.....	D	.....	.....	.....	35 00	35 00	35 00	35 00	35 00	50 00	45 00
Walkerville.....	A	.....	.....	38 00	38 00	38 00	38 00	38 00	36 00	36 00	35 00
Wallaceburg	D	.....	.....	.....	38 45	38 45	38 45	38 45	38 00	38 45	35 00
Waterdown	D	37 50	26 00	26 00	26 00	26 00	26 00	26 00	26 00	26 00	31 00
Waterford	D	.....	.....	.....	39 00	39 00	39 00	39 00	39 00	33 00	33 00
Waterloo	B	26 00	23 50	22 50	22 50	22 00	21 00	21 00	20 00	20 00	21 00
Watford	D	.....	.....	.....	.....	.....	59 45	59 45	65 00	85 00	85 00
Waubashene	D	.....	.....	.....	35 00	35 00	25 00	25 00	30 00	45 00	45 00
Welland	B	.....	14 50	14 00	14 00	14 00	14 00	14 00	14 00	14 00	16 00
Wellington	D	.....	.....	.....	.....	.....	.....	.....	52 76	52 76	52 76
Wellesley	D	.....	.....	.....	.....	.....	39 96	39 96	39 00	39 00	39 00
West Hamilton, ext ..	.....	Served by Ancaster									
West Lorne	D	.....	.....	.....	.....	.....	55 60	55 60	55 00	55 00	50 00
Weston	B	30 00	30 00	30 00	30 00	30 00	30 00	30 00	25 00	23 00	23 00
Williamsburg	D	.....	.....	.....	25 09	30 00	30 00	30 00	30 00	50 00	73 89
Winchester	D	.....	.....	38 28	39 54	43 00	43 00	43 00	43 00	69 84	85 00
2Windsor	A	.....	.....	38 00	38 00	38 00	38 00	38 00	36 00	36 00	35 00
Woodbridge.....	D	.....	.....	.....	33 83	33 83	33 83	33 83	33 00	31 00	31 00
Woodstock.....	B	26 00	23 00	23 00	23 00	23 00	21 00	21 00	20 00	20 00	21 00
Woodville	D	.....	.....	.....	70 24	70 00	50 00	50 00	55 00	80 00	80 00
Wyoming	D	.....	.....	.....	.....	38 34	38 34	38 34	38 00	60 00	60 00
York Township .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zurich.....	D	.....	.....	.....	.....	.....	.....	69 34	69 00	60 00	60 00

* Rate based on load characteristics and determined at end of year.
Note A—Power delivered at 46,000, 26,400 or 22,000 volts.
Note B—Power delivered at 13,200 or 12,000 volts.
2Windsor 1921 Rate for 60 cycle power are 25% higher than rates given here.

“F”—Concluded
Power Rates to Consumers

Power Rates to Consumers									
1920					Suggested, 1921				
Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount	Service Charge per H.P. per Month	1st 50 Hr. per Month per Kw-hr.	2nd 50 Hr. per Month per Kw-hr.	All Additional per Kw-hr.	Prompt Payment Discount
\$ c.	c.	c.	c.	%	\$ c.	c.	c.	c.	%
1 00	3.6	2.4	0.15	10	1 00	3.6	2.4	0.15	10
1 00	7.8	5.2	0.15	10	1 00	7.8	5.2	0.15	10
1 00	1.6	1.066	0.16	25&10	Rural Rates				
1 00	3.8	2.5	0.15	10	1 00	1.6	1.066	0.166	25&10
1 00	3.3	2.2	0.15	10	1 00	3.8	2.5	0.15	10
1 00	3.1	2.1	0.15	10	1 00	1.6	1.066	0.166	25&10
1 00	1.867	1.267	0.16	25&10	1 00	3.1	2.0	0.15	10
1 00	1.67	1.11	0.133	10&10	1 00	3.3	2.2	0.15	10
1 00	3.8	2.5	0.15	10	1 00	1.73	1.133	0.147	25&10
1 00	2.5	1.7	0.15	10	1 00	1.67	1.11	0.133	10&10
1 00	3.6	2.4	0.15	10	1 00	3.8	2.5	0.15	10
1 00	6.8	4.6	0.15	10	1 00	2.2	1.5	0.15	10
1 00	6.8	4.6	0.15	10	1 00	3.2	2.1	0.15	10
1 00	2.8	1.8	0.15	10	1 00	6.8	4.6	0.15	10
1 00	5.6	3.8	0.15	10	1 00	6.8	4.6	0.15	10
1 00	7.1	4.7	0.15	10	1 00	6.8	4.6	0.15	10
1 00	5.6	3.8	0.15	10	1 00	2.5	1.7	0.15	10
1 00	6.8	4.6	0.15	10	1 00	5.4	3.6	0.15	10
1 00	5.1	3.4	0.15	10	1 00	6.4	4.3	0.15	10
1 00	2.9	1.9	0.15	10	1 00	5.6	3.8	0.15	10
A.C. 1.25 & 1.00	1.5	0.75	0.4	10	1 00	6.8	4.6	0.15	10
D.C. 1.35 & 1.00	2.5	1.25	0.6	10	1 00	5.1	3.4	0.15	10
1 00	4.2	2.8	0.15	10	1 00	2.8	1.8	0.15	10
1 00	6.8	4.6	0.15	10	† A.C. 1.25 & 1.00	1.5	0.75	0.4	10
1 00	5.6	3.8	0.15	10	† D.C. 1.35 & 1.00	2.5	1.25	0.6	10
1 00	3.5	2.3	0.15	10	1 00	4.2	2.8	0.15	10
1 00	3.6	2.4	0.15	10	1 00	6.8	4.6	0.15	10
1 00	3.3	2.2	0.15	10	1 00	5.6	3.8	0.15	10
1 00	3.5	2.3	0.15	10	1 00	3.1	2.0	0.15	10
1 00	1.67	1.11	0.133	10&10	1 00	3.2	2.1	0.15	10
1 00	7.1	4.7	0.15	10	1 00	3.3	2.2	0.15	10
1 00	4.9	3.3	0.15	10	1 00	3.1	2.0	0.15	10
1 00	1.73	1.13	0.147	25&10	1 00	3.3	2.2	0.15	10
1 00	4.9	3.3	0.15	10	1 00	3.1	2.0	0.15	10
1 00	3.9	2.6	0.15	10	1 00	1.67	1.11	0.15	10&10
1 00	2.8	1.8	0.15	10	1 00	7.1	4.7	0.15	10
1 00	6.5	4.4	0.15	10	1 00	4.9	3.3	0.15	10
1 00	2.0	1.33	0.167	10&10	1 00	1.73	1.33	0.147	25&10
1 00	4.2	2.8	0.3	10	1 00	5.4	3.6	0.15	10
1 00	4.5	3.0	0.15	10	1 00	3.9	2.6	0.15	10
1 00	3.5	2.3	0.15	10	1 00	2.8	1.8	0.15	10
1 00	2.8	1.8	0.15	10	1 00	4.9	3.3	0.15	10
1 00	1.867	1.267	0.16	25&10	1 00	2.133	1.33	0.173	25&10
1 00	6.8	4.6	0.15	10	1 00	6.4	4.3	0.15	10
1 00	7.1	4.7	0.15	10	1 00	6.4	4.3	0.15	10
.....	.....	.....	.....	.....	1 00	3.1	2.0	0.15	10
1 00	7.1	4.7	0.15	10	1 00	2.5	1.7	0.15	10
1 00	1.867	1.267	0.16	25&10	1 00	1.867	1.267	0.16	25&10
1 00	6.8	4.6	0.15	10	1 00	6.8	4.6	0.15	10
1 00	7.1	4.7	0.15	10	1 00	7.1	4.7	0.15	10
.....	.....	.....	.....	.....	1 00	2.11	1.39	0.167	10&10
1 00	7.1	4.7	0.15	10	1 00	6.8	4.6	0.15	10

† 1.25 and 1.35 for 1st 10 h.p. 1.00 for all additional h.p.
Note C—Power delivered at 6,600 volts.
Note D—Power delivered at 4,000 or 2,200 volts.

STATEMENT
Lighting Rates

Municipality	1920							
	Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
	Per 100 Sq. Ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
	c.	c.	c.	c.	c.	c.	%	\$ c.
Acton	3	3	1.5	6	3	0.6	10	0 75
Ailsa Craig	3	6	3	12	6	1.2	10	0 75
Alliston	3	6	3	12	6	1.2	10	1 00
Ancaster	3	5	2.5	10	5	1	10	0 75
Arthur	3	7	3.5	14	7	1.4	10	1 50
Aylmer	3	5.5	2.75	11	5.5	1.1	10	0 75
Ayr	3	6	3	12	6	1.2	10	0 75
Baden	3	3.5	1.75	7	3.5	0.7	10	0 75
Barrie	3	2	1	4	2	0.4	10	0 75
Barton Township	3	3.0	1.5	5	2.5	0.15	10	0 75
Beachville	3	3.5	1.75	7	3.5	0.7	10	0 75
Beaverton	3	5	2	10	5	1	10	1 25
Beeton	3	7	3.5	14	7	1.4	10	1 50
Blenheim	3	5	2.5	10	5	1.0	10	0 75
Bloomfield	3	7	3.5	14	7	1.4	10	1 00
Bolton	3	6	3	12	6	1.2	10	1 00
Bothwell	3	7.5	3.75	15	7.5	1.5	10	1 00
Bradford	3	7	3.5	14	7	1.4	10	1 55
Brampton	3	2	1	4	2	0.4	10	0 50
Brantford	3	2	1	3.5	1.2	0.12	10	0 50
Brechin	3	7	3.5	14	7	1.4	10	1 50
Bridgeport	3	Kitchener rate + 10%						
Brantford Township	3	3	1.5	6	3	0.6	10	0 70
Breslau	3	6	3	12	6	1.2	10	1 00
Brooklin	3	5	2.5	10	5	1	10	0 50
Broughdale	3	3	1.5	.....	.....	.....	10	.....
Brigden	3	7.5	3.75	15	7.5	1.5	10	1 00
Brockville	3	5	2.5	10	5	1	10	0 75
Bullock's Corners and Greensville	3	4	2	8	4	0.8	10	0 75
Burford	3	7	3.5	14	7	1.4	10	1 50
Burgessville	3	5.5	2.75	11	5.5	1.1	10	0 75
Caledonia	3	3	1.5	6	3	0.6	10	0 75
Cannington	3	6	2	12	6	1.2	10	1 50
Carleton Place	3	4	2	8	4	0.8	10	1 00
Chatham	3	3.5	1.75	7	3.5	0.7	10	0 75
Chatsworth	3	6	3	12	6	1.2	10	1 00
Chesley	3	5	2.5	10	5	1	10	1 00
Chesterville	3	6	3	12	6	1.2	10	1 00
Chippawa	3	4.5	2.25	9	4.5	0.9	10	1 00
Clinton	3	4	2	8	4	0.8	10	0 75
Coldwater	3	5	2.5	10	5	1	10	1 25
Collingwood	3	2	1	4	2	0.4	10	0 75
Comber	3	7	3.5	14	7	1.4	10	1 00
Cookstown	3	7	3.5	14	7	1.4	10	1 50
Creemore	3	7	3.5	14	7	1.4	10	1 00
Dashwood	3	7	3.5	14	7	1.4	10	0 75
Delaware	3	7	3.5	14	7	1.4	10	1 25
Doon and Blair, ext.	3	4	2	8	4	0.8	10	0 75
Dorchester	3	6	3	12	6	1.2	10	0 75
Dray on	3	7	3.5	14	7	1.4	10	1 00

“G”

in Municipalities

Suggested 1921							
Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
Per 100 Sq. Ft.	1st 3 Kw-hr. per 100 sq.ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
c.	c.	c.	c.	c.	c.	%	\$ c.
33	3	1.5	6	3	0.6	10	0 75
33	3	2.5	10	5	1.0	10	0 75
33	6	3	12	6	1.2	10	1 25
23	5	2.5	10	5	1	10	0 75
23	8	4	16	8	1.6	10	1 50
3	5.0	2.5	10	5	1	10	0 75
3	5	2.5	10	5	1	10	1 00
3	2.5	1.25	5	2.5	0.5	10	0 75
3	2	1	4	2	0.4	10	0 75
3	3.0	1.5	5	2.5	0.15	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	5	2.5	10	5	1	10	1 25
3	8	4	16	8	1.6	10	1 50
3	4.5	2.25	9	4.5	9	10	0 75
3	7	3.5	14	7	1.4	10	1 00
3	6	3	12	6	1.2	10	1 00
3	6	3	12	6	1.2	10	1 00
3	8	4	16	8	1.4	10	1 50
3	2	1	4	2	0.4	10	0 75
3	2	1	3.5	1.2	0.12	10	0 75
3	8	4	16	8	1.6	10	1 50
3	3	Kitchener rate + 10 %		3	0.6	10	1 00
3	5	2.5	10	Rural Rates		10	.....
5	3	1.5	.....	.....	.....	10	.....
3	6	3	12	6	1.2	10	1 00
3	6	3	12	6	1.2	10	1 25
3	4	2	8	4	0.8	10	1 00
3	7	3.5	14	7	1.4	10	1 50
3	5.5	2.75	11	5.5	1.1	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	6	3	12	6	1.2	10	1 50
3	4.5	2.25	9	4.5	0.9	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	7	3.5	14	7	1.4	10	1 50
3	6	3	12	6	1.2	10	1 25
3	7	3.5	14	7	1.4	10	1 50
3	4	2	8	4	0.8	10	1 00
3	4	2	8	4	0.8	10	0 75
3	6	3	12	6	1.2	10	1 25
3	3	1.5	6	3	0.6	10	0 75
3	7	3.5	14	7	1.4	10	1 25
3	7	3.5	14	7	1.4	10	1 50
3	7	3.5	14	7	1.4	10	1 00
3	7	3.5	14	7	1.4	10	0 75
3	7	3.5	14	7	1.4	10	1 25
3	4	2	8	4	0.8	10	1 00
3	5.5	2.75	11	5.5	1.1	10	0 75
3	6.5	3.25	13	6.5	1.3	10	1 25

STATEMENT

Lighting Rates

Municipality	1920							Prompt Payment Discount	Minimum Net Monthly Bill
	Domestic			Commercial					
	Per 100 Sq. Ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.			
Dresden.. .. .	c.	c.	c.	c.	c.	c.	%	\$ c.	
Drumbo.. .. .	3	4.5	2.25	9	4.5	0.9	10	0 75	
Dublin.. .. .	3	6	3	12	6	1.2	10	1 00	
Dundalk.. .. .	3	7	3.5	14	7	1.4	10	1 50	
Dundas.. .. .	3	4.5	2.25	9	4.5	0.9	10	1 00	
Dunnville	3	2	1	5	2	0.15	10	0 50	
Durham	3	4	2	8	4	0.8	10	0 75	
Dutton	3	5	2.5	10	5	1	10	1 00	
Elmira.. .. .	3	3.5	1.75	7	3.5	0.7	10	0 75	
Elmvale.. .. .	3	3	1.5	6	3	0.6	10	0 75	
Elmwood	3	4.5	2.25	9	4.5	0.9	10	1 00	
Elora	3	5	2.5	10	5	1	10	1 25	
Embryo	3	3	1.5	6	3	0.6	10	0 75	
Etobicoke Tp.. .. .	3	7.5	3.75	15	7.5	1.5	10	1 50	
Exeter	3	4.5	2.25	9	4.5	0.9	10	0 75	
Fergus	3	4.5	2.25	9	4.5	0.9	10	0 75	
Flesherton.. .. .	3	3	1.5	6	3	0.6	10	0 75	
Ford City	3	4	2	8	4	0.8	10	1 25	
Forest	3	4	2	8	4	0.8	10	0 75	
Galt.. .. .	3	7	3.5	14	7	1.4	10	1 00	
Gamebridge	3	2	1	4	2	0.4	10	0 50	
Georgetown.. .. .	3+50c.	8	4	16	8	1.6	10	1 50	
Glencoe	3	2.5	1.25	5	2.5	0.5	10	0 75	
Glen Williams, ext.. .. .	3	8	4	16	8	1.6	10	1 00	
Goderich	3	4	2	8	4	0.8	10	0 75	
Grand Valley	3	3.5	1.75	7	3.5	0.7	10	0 75	
Grantham Township	3	7	3.5	14	7	1.4	10	1 50	
Granton .. .. .	.....	6	Rural Rates			1.2	10	1 00
Gravenhurst	3	4.5	2.25	9	4.5	0.9	10	1 00	
Guelph	3	2	1	4	2.0	0.4	10	0 50	
Hagersville	3	3	1.5	6	3	0.6	10	0 75	
Hamilton	3	2	1	3.5	1.2	0.12	10	0 50	
Hanover.. .. .	3	4.5	2.25	9	4.5	0.9	10	0 75	
Harriston.. .. .	3	5	2.5	10	5	1	10	1 00	
Hensall	3	6	3	12	6	1.2	10	1 00	
Hespeler	3	3	1.5	6	3	0.6	10	0 75	
Highgate	3	6.5	3.25	13	6.5	1.3	10	1 00	
Holstein	3	8	4	16	8	1.6	10	1 50	
Horning's Mills.. .. .	3	7	3.5	14	7	1.4	10	1 50	
Huntsville	3	6	3	12	6	1.2	10	1 00	
Ingersoll	3	2	1	4	2	0.4	10	0 75	
Kingston	3	4	2	8	4	0.8	10	.....
Kirkfield	3	6	3	12	6	1.2	10	1 50	
Kitchener	3	2	1	4	2.0	0.4	10	0 50	
Lambeth.. .. .	3	6	3	12	6	1.2	10	1 25	
Listowel	3	4	2	8	4	0.8	10	0 75	
London	3	2	1	4	2.0	0.4	10	0 50	
Lucan	3	4	2	8	4	0.8	10	0 75	
Lynden	3	5	2.5	10	5	1	10	1 50	
Markdale	3	4	2	8	4	0.8	10	1 00	

"G"—Continued
in Municipalities

Suggested, 1921							
Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
Per 100 Sq. Ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
c.	c.	c.	c.	c.	c.	%	\$ c.
3	4	2	8	4	0.8	10	0 75
3	6	3	12	6	1.2	10	1 00
3	7	3.5	14	7	1.4	10	1 50
3	5.5	2.75	11	5.5	1.1	10	1 00
3	2	1	5	2	0.15	10	0 75
3	4	2	8	4	0.8	10	0 75
3	5	2.5	10	5	1	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	4.5	2.25	9	4.5	0.9	10	1 00
3	6	3	12	6	1.2	10	1 50
3	3	1.5	6	3	0.6	10	0 75
3	7.5	3.75	15	7.5	1.5	10	1 50
3	4	2	8	4	0.8	10	0 75
3	4	2	8	4	0.8	10	0 75
3	3.5	1.75	7	3.5	0.7	10	0 75
3	5	2.5	10	5	1.0	10	1 50
3	4	2	8	4	0.8	10	0 75
3	6	3	12	6	1.2	10	1 00
3	2	1	4	2	0.4	10	0 75
3+50c.	8	4	16	8	1.6	10	1 50
3	2	1	4	2	0.4	10	0 75
3	8	4	16	8	1.6	10	1 00
3	4.5	2.25	9	4.5	0.9	10	0 75
3	3.5	1.75	7	8	0.7	10	0 75
3	8	4	16	8	1.6	10	1 50
3	6	3	12	6	1.2	10	1 00
3	4.5	2.25	9	4.5	0.9	10	1 00
3	2	1	4	2	0.4	10	0 75
3	2.5	1.25	5	2.5	0.5	10	0 75
3	2	1	3.5	1.2	0.12	10	0 75
3	5	2.5	10	5	1	10	1 00
3	4.5	2.25	9	4.5	0.9	10	1 00
3	6	3	12	6	1.2	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	6	3	12	6	1.2	10	1 00
3	9	4.5	18	9	1.8	10	1 50
3	7	3.5	14	7	1.4	10	1 50
3	6	3	12	6	1.2	10	1 00
3	2	1	4	2	0.4	10	0 75
3	3.5	1.75	7	3.5	0.4	10	0 75
3	6	3	12	6	1.2	10	1 50
3	2	1	4	2	0.4	10	0 75
3	6	3	12	6	1.2	10	1 25
3	4	2	8	4	0.8	10	0 75
3	2	1	4	2	0.4	10	0 75
3	4	2	8	4	0.8	10	0 75
3	4.5	2.25	9	4.5	0.9	10	1 50
3	4	2	8	4	0.8	10	1 00

STATEMENT

Lighting Rates

Municipality	1920							
	Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
	Per 100 sq. ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
	c.	c.	c.	c.	c.	c.	%	\$ c.
Markham.....	33	10	5	20	10	2.0	10	1 00
Midland.....	33	3	1.5	6	3	0.6	10	0 75
Milton.....	33	3	1.5	6	3	0.6	10	0 75
Milverton.....	33	4	2	8	4	0.8	10	0 75
Mimico.....	3	2.5	1.25	5	2.5	0.5	10	0 75
Mitchell.....	3	4	2	8	4	0.8	10	0 75
Moorefield.....	3	7.5	3.75	15	7.5	1.5	10	1 50
Mount Brydges.....	3	6	3	12	6	1.2	10	1 25
Mount Forest.....	3	4.5	2.25	9	4.5	0.9	10	0 75
Niagara-on-the-Lake.....	3	4	2	8	4	0.8	10	0 75
Neustadt.....	3	6	3	12	6	1.2	10	1 00
Newbury.....								
New Hamburg.....	3	3	1.5	6	3	0.6	10	0 75
New Toronto.....	3	2.5	1.25	5	2.5	0.5	10	0 50
Niagara Falls.....	3	2	1	4	1.5	0.15	10	0 50
Norwich.....	3	3	1.5	6	3	0.6	10	0 75
Oil Springs.....	3	5	2.5	10	5	1	10	1 00
Omeme.....	3	5	2.5	10	5	1	10	1 00
Orangeville.....	3	4.5	2.25	9	4.5	0.9	10	1 00
Ottawa.....	3	2	1.5	5	2.2	0.5	10	0 50
Otterville.....	3	7	3.5	14	7	1.4	10	0 75
Owen Sound.....	3	3	1.5	6	3	0.6	10	0 75
Palmerston.....	3	4.5	2.25	9	4.5	0.9	10	0 75
Paris.....	3	2	1	5	2	0.5	10	0 50
Parkhill.....	3	9	4.5	18	9	1.8	10	1 50
Perth.....	3	4.5	2.25	9	4.5	0.9	10	1 00
Penetang.....	3	4	2	8	4	0.8	10	1 00
Peterboro'.....	3	2.5	1.25	5	2.5	0.5	10	0 75
Petersburg, ext.....	3	6	3	12	6	1.2	10	1 00
Petrolia.....	3	4.5	2.25	9	4.5	0.9	10	0 75
Plattsville.....	3	6	3	12	6	1.2	10	0 75
Picton.....	3	7	3.5	14	7	1.4	10	0 75
Port Arthur.....	3	2.5	1.5	5	2.5	.....	10	0 75
Port Colborne.....	3	4	2	8	4	0.8	10	0 75
Port Credit.....	3	3	1.5	6	3	0.6	10	0 75
Port Dalhousie.....	3	4.5	2.25	9	4.5	0.9	10	0 75
Port McNicoll.....	3	4.5	2.25	9	4.5	0.9	10	1 25
Port Robinson, ext.....	3	3	1.5	6	3	0.6	10	0 75
Port Stanley.....	3	4	2	8	4	0.8	10	0 75
Prescott.....	3	4	2	8	4	0.8	10	0 75
Preston.....	3	2.5	1.25	5	2.5	0.5	10	0 75
Princeton.....	3	7.5	3.75	15	7.5	1.5	10	1 50
Ridgetown.....	3	4.5	2.25	9	4.5	0.9	10	0 75
Rockwood.....	3	5	2.5	10	5	1	10	1 00
Rodney.....	3	8	4	16	8	1.6	10	0 75
Sarnia.....	3	4	2	8	4	0.8	10	0 75
Sandwich.....	3	4	2	8	5	0.8	10	0 75
Scarboro Township.....	3	5.5	2.75	11	5.5	1.1	10	0 75
Seaforth.....	3	3.5	1.75	7	3.5	0.7	10	0 75
Sebringville, ext.....	3	5	2.5	10	5	1	10	0 75

“ G ”—Continued
in Municipalities

Suggested, 1921							
Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
Per 100 sq. ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
c.	c.	c.	c.	c.	c.	%	\$ c.
3	3	4.5	18	9	1.8	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	4	2	8	4	0.8	10	0 75
3	2	1	4	2	0.4	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	7	3.5	14	7	1.4	10	1 50
3	6	3	12	6	1.2	10	1 25
3	5.5	2.75	11	5.5	1.1	10	1 00
3	4	2	8	4	0.8	10	0 75
3	7	3.5	14	7	1.4	10	1 50
3	8	4	16	8	1.6	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	2	1	4	2	0.4	10	0 75
3	2	1	4	1.5	0.15	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	5	2.5	10	5	1	10	1 00
3	5	2.5	10	5	1	10	1 00
3	5	2.5	10	5	1	10	1 00
3	2	1.5	5	2.2	0.5	10	0 75
3	6	3	12	6	1.2	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	4	2	8	4	0.8	10	0 75
3	2	1	4	2	0.4	10	0 75
3	8	4	16	8	1.6	10	1 50
3	5	2.5	10	5	1.0	10	1 00
3	4	2	8	4	0.8	10	1 00
3	2.5	1.25	5	2.5	0.5	10	0 75
3	6	3	12	6	1.2	10	1 00
3	4	2	8	4	0.8	10	0 75
3	5	2.5	10	5	1	10	1 00
3	6	3	12	6	1.2	10	0 75
3	2.5	1.5	5	2.5	.....	10	0 75
3	4	2	8	4	0.8	10	1 00
3	3	1.5	6	3	0.6	10	0 75
3	4.5	2.25	9	4.5	0.9	10	1 00
3	6	3	12	6	1.2	10	1 25
3	3	1.5	6	3	0.6	10	0 75
3	4	2	8	4	0.8	10	0 75
3	5	2.5	10	5	1	10	1 25
3	2.5	1.25	5	2.5	0.5	10	0 75
3	7.5	3.75	15	7.5	1.5	10	1 50
3	3.5	1.75	7	3.5	0.7	10	0 75
3	5	2.5	10	5	1	10	1 00
3	6	3	12	6	1.2	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	4	2	8	4	0.8	10	0 75
3	5.5	2.75	11	5.5	1.1	10	0 75
3	3	1.5	6	3	0.6	10	0 75
3	5	2.5	10	5	1	10	0 75

STATEMENT

Lighting Rates

Municipality	1920							Prompt Payment Discount	Minimum Net Monthly Bill
	Domestic			Commercial					
	Per 100 sq. ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.			
	c.	c.	c.	c.	c.	c.	%	\$ c.	
Shelburne	3	4.5	2.25	9	4.5	0.9	10	1 00	
Simcoe	3	3.5	1.75	7	3.5	0.7	10	0 75	
Smith's Falls.....	3	5	2.5	10	5	1	10	1 00	
Springfield	3	7	3.5	14	7	1.4	10	1 00	
St. Agatha	3	6	3	12	6	1.2	10	0 75	
St. Catharines	3	2	1	4	2	0.4	10	0 50	
St. George	3	5	2.5	10	5	1	10	0 75	
St. Jacob's.....	3	5	2.5	10	5	1	10	0 75	
St. Mary's.....	3	3	1.5	6	3	0.6	10	0 75	
St. Thomas.....	3	2	1	4	2	0.4	10	0 50	
Stamford Township	3	3	1.5	6	3	0.6	10	0 75	
Stayner	3	6	3	12	6	1.2	10	1 00	
Stratford.....	3	2	1	4	2	0.4	10	0 50	
Strathroy.....	3	4	2	8	4	0.8	10	0 75	
Sunderland.....	3	7		14	7	1.4	10	1 50	
Tara	3	7	3.5	14	7	1.4	10	1 50	
Tavistock	3	3.5	1.75	7	3.5	0.7	10	0 75	
Tecumseh, ext.....	3	5	2.5	10	5	1	10	0 75	
Thamesford	3	7	3.5	14	7	1.4	10	0 75	
Thamesville	3	6	3	12	6	1.2	10	1 00	
Thorndale	3	7	3.5	14	7	1.4	10	1 00	
Thornton	3	7	3.5	14	7	1.4	10	1 50	
Tilbury	3	5	2.5	10	5	1	10	1 00	
Tillsonburg.....	3	3	1.5	6	3	0.6	10	0 75	
Toronto	3	2	1	5	2.5	0.5	10	0 50	
Toronto Township	1.50	4.5	2.25	.....	.....	.....	.....	0 75
Tottenham	3	7	3.5	14	7	1.4	10	1 50	
Victoria Harbor	3	4	2	8	4	0.8	10	1 00	
Walkerville.....	3	4	2	8	4	0.8	10	0 75	
Wallaceburg	3	5	2.5	10	5	1	10	0 75	
Waterdown.....	3	4	2	8	4	0.8	10	0 75	
Waterford	3	4	2	8	4	0.8	10	0 75	
Waterloo	3	2	1	4	2	0.4	10	0 50	
Watford.....	3	7.5	3.75	15	7.5	1.5	10	1 00	
Waubashene	3	7	3.5	14	7	1.4	10	1 25	
Welland.....	3	2	1	5	2	0.15	10	0 50	
Wellesley	3	4.5	2.25	9	4.5	0.9	10	0 75	
Wellington.....	3	5.5	2.75	11	5.5	1.1	10	0 75	
West Hamilton, ext.....	3	4	2	8	4	0.8	10	0 75	
West Lorne.....	3	7	3.5	14	7	1.4	10	0 75	
Weston	3	2	1	4	2	0.4	10	0 50	
Williamsburg	3	5	2.5	10	5	1	10	1 00	
Winchester	3	5	2.5	10	5	1	10	1 00	
Windsor.....	2 3								
Sandwich.....		4	2	8	4	0.8	10	0 50	
Woodbridge	3	3	1.5	6	3	0.6	10	0 75	
Woodstock.....	3	2	1	4	2	0.4	10	0 50	
Woodville	3	7	2	14	7	1.4	10	1 50	
Wyoming	3	7.5	3.75	15	7.5	1.5	10	1 00	
Zurich	3	7.5	3.75	15	7.5	1.5	10	1 00	
York Township.....	.....	.....	.....	.....	.....	.....	.....	.....

‡ 60 cycle lighting rates 25% higher.

"G"—Concluded
in Municipalities

Suggested, 1921

Domestic			Commercial			Prompt Payment Discount	Minimum Net Monthly Bill
Per 100 sq. ft.	1st 3 Kw-hr. per 100 sq. ft. per Kw-hr.	All Additional per Kw-hr.	1st 30 Hr. per Kw-hr.	Next 70 Hr. per Kw-hr.	All Additional per Kw-hr.		
c.	c.	c.	c.	c.	c.	%	\$ c.
33	5.5	2.75	11	5.5	1.1	10	1 25
33	2.5	1.25	5	2.5	0.5	10	0 75
33	5	2.5	10	5	1	10	1 00
33	7	3.5	14	7	1.4	10	1 00
Rural Rates							
33	2	1	4	1.5	0.15	10	0 75
33	4	2	8	4	0.8	10	1 00
33	4	2	8	4	0.8	10	1 00
33	3	1.5	6	3	0.6	10	0 75
33	2	1	4	2	0.4	10	0 75
33	3	1.5	6	3	0.6	10	0 75
33	6	3	12	6	1.2	10	1 00
33	2	1	4	2	0.4	10	0 75
33	3	1.5	6	3	0.6	10	0 75
33	8	4	16	8	1.6	10	1 50
33	8	4	16	8	1.6	10	1 50
33	2.5	1.25	5	2.5	0.5	10	1 00
33	5	2.5	10	5	1	10	0 75
33	6	3	12	6	1.2	10	0 75
33	6	3	12	6	1.2	10	1 00
33	6.5	3.25	13	6.5	1.3	10	1 00
33	7	3.5	14	7	1.4	10	1 50
33	5	2.5	10	5	1	10	1 25
33	3	1.5	6	3	0.6	10	0 75
33	2	1	5	3	1.0	10	0 75
1.50	4.5	2.25	.....	.....	.....	.....	0 75
33	8	4	16	8	1.6	10	1 50
33	5	2.5	10	5	1	10	1 00
33	3	1.5	6	3	0.6	10	0 75
33	4	2	8	4	0.8	10	0 75
33	3	1.5	6	3	0.6	10	0 75
33	3	1.5	6	3	0.6	10	0 75
33	2	1	4	2	0.4	10	0 75
33	7.5	3.75	15	7.5	1.5	10	1 00
33	7	3.5	14	7	1.4	10	1 25
33	2	1	4	2	0.4	10	0 75
33	4	2	8	4	0.8	10	1 00
33	6	3	12	6	1.2	10	1 00
33	4	2	8	4	0.8	10	0 75
33	6	3	12	6.7	1.2	10	0 75
33	2	1	4	2	0.4	10	0 75
33	6	3	12	6	1.2	10	1 50
33	6	3	12	6	1.2	10	1 50
33	3	1.5	6	3	0.6	10	0 75
33	3	1.5	6	3	0.6	10	0 75
33	2	1	4	2	0.4	10	0 75
33	7	3.5	14	7	1.4	10	1 50
33	7.5	3.75	15	7.5	1.5	10	1 00
33	6	3	12	6	1.2	10	1 00
33	3	1.5	6	3	0.6	19	0 75

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